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ABSTRACT

An analysis was done of the quality of the data supplied by respondents to the National Postsecondary Student Aid Study, 1987 (NPSAS:87). The NPSAS:87 was a large-scale survey that obtained extensive data on the educational, demographic, and financial aspects of postsecondary students and their parents. The study compared the responses to similar questions asked of the three groups of respondents to determine the consistency and validity of responses. In particular comparisons were made for similar items between students and institutions, between parents and institutions, and between parents and students. The analysis found the following: (1) good correspondence was found between student and institution respondents for factual demographic information such as student age, sex, year of high school degree and marital status; (2) there was little agreement between students and institutions with regard to whether or not students received certain types of financial aid with students tending to underreport amount of aid received; (3) there was good agreement between parents and institutions for reporting adjusted gross income; (4) parents were not as accurate in reporting on tuition and fees as institutions and parents systematically overreported the amount paid for tuition and fees. Appendixes contain methodology and technical information. (JB)

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Technical Report

National Postsecondary Student Aid Study

Quality of Responses in the 1987 National Postsecondary Student Aid Study

Contractor Report

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Technical Report April 1993

National Postsecondary Student Aid Study

Quality of Responses in the 1987 National Postsecondary Student Aid Study

Contractor Report

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April 1993

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Foreword

This report uses information about students, parents, and institutions fromthe National Postsecondary Student Aid Study, 1987 (NPSAS:87). The information analyzed ranges from the demographic data about the students and parents to the financial aid received by the student from the institution. The report compares the responses to similar questions asked of the three groups of respondents to determine the consistency and validity of responses.

NPSAS:87 is a large-scale survey that contains extensive information on the education, demographic, and financial aspects of postsecondary education of students and their parents. The survey is representative of both graduate and undergraduate students who attend all sectors of postsecondary institutions. The financial aid information collected in the survey is of particular importance since the process of awarding financial aid by institutions and the method by which students finance their education are complex.

The purpose of this report is to provide a broad look at the quality of the data supplied by different respondents. The report is not the definitive analysis of these data. It is hoped that other researchers will use the results from this report to further explore the issues of data quality.

Information about obtaining the NPSAS data file is available from the U.S. Department of Education, Office of Educational Research and Improvement, Information Technology Branch, 555 New Jersey Avenue, N.W., Room 215, Capitol Place Building, Washington, D.C. 20208.

Paul D. Planchon, Associate Commissioner
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Highlights

This report examines the quality of responses to the 1986–87 National Postsecondary Student Aid Study survey. Three sets of comparisons were made for similar items asked in the survey: between students and institutions, between parents and institutions, and between parents and students. Items that were compared include demographic characteristics, family financial characteristics, and financial aid information. Correspondence was measured using two correlation methods. Pearson's product moment correlation was employed for variables measured on an interval or ordinal scale such as parents' education; and Cramer's V was used for variables measured on a nominal scale such as race–ethnicity. Whether or not there was a systematic bias in reporting dollar amounts was also examined. A few of the major highlights are as follows:

Student-Institution Comparisons

- Good correspondence was found between student and institution responses for factual demographic information such as student's age, sex, year of high school degree and marital status (correlation coefficients ranging from .81 to .97). Agreement was slightly lower for race–ethnicity (correlation = .75).

- There was little agreement between students and institutions with regard to whether or not students received certain types of financial aid (mean correlation for receipt of grant aid, work aid, loan aid, and federal aid =.14).

- Somewhat better correspondence was found for the actual amounts of aid received, though agreement was still relatively low (.38). The best agreement was found for the amount of loan aid received (.52).

- Compared to institution records, students systematically underreported the amounts of financial aid they received: by 16 percent for loan aid, 32 percent for grant aid, and 76 percent for work aid.

- Students were somewhat more reliable in reporting family financial characteristics such as income and federal income tax paid (average correlation =.63).

Parent-Institution Comparisons

- There was relatively good agreement between parents and institutions for reporting adjusted gross income (.83), number of dependents (.79), and federal income taxes paid (.76).

- Parents were not as accurate in reporting on tuition and fees relative to the institution record (.65). Furthermore, parents systematically overreported the amount paid for tuition and fees.

Parent-Student Comparisons

- Students and parents were in relative agreement when reporting on parents'

highest education (.63 and .69, respectively, for mother's and father's education).

- While students and parents had moderate agreement for the amount paid for tuition and fees (.64), they had poor agreement for parent's income (.27) and for the amount of money parents lent to students (.17).

- There was better agreement between parents and students with respect to the amount of non-loan contributions parents made toward students' educational expenses (.54).

- Relative to their parents, students tended to overreport the amount of non-loan contributions made by their parents and underreport the amount of loans provided by parents.

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Chapter 1

Introduction

The need for a comprehensive national database on postsecondary student financial aid prompted the U.S. Department of Education to conduct the 1987 National Postsecondary Student Aid Study (NPSAS:87).[1] NPSAS is a nationally representative survey of postsecondary students and the institutions they attend. It also includes a subsample of students' parents. NPSAS participants provided information on many aspects of students' educational experiences, including course loads, costs, and financial aid. In addition, NPSAS provides detailed information on the demographic and economic backgrounds of students and their parents. The primary objective of the survey was to gather data on students' attendance costs at postsecondary institutions and on how students and their parents finance these costs.

Earlier studies about student financial aid were often limited because the data were obtained from a single source of respondents or concerned only a single financial aid program. In order to obtain accurate and complete information on student participation in financial aid programs, especially among students participating in multiple financial aid programs, it is essential to collect information from a combination of sources including students, parents, and institutions.[2] Thus, NPSAS was conceived to provide the first such comprehensive and nationally representative student-level database on postsecondary financial aid.

This report presents results from an analysis of the NPSAS:87 survey data. Specifically, this study compares self-reported information provided by students and their parents with information obtained from the institution. Comparisons between student and parent responses to similar items are also examined. The data are assessed by determining how well the information from the three sources corresponds. This particular analysis was conducted without the use of weights associated with the data. It was designed to study whether or not specific questionnaire items obtained accurate information. Comparisons of responses were analyzed on the whole respondent population and by major subgroups of student respondents such as attendance status, dependency status, and institutional type.

This report is organized into five chapters. This introductory chapter provides an overview of earlier survey data assessment studies and their relation to NPSAS. Chapter 2 discusses the NPSAS data and the methodology used to assess the quality of responses. Chapter 3 presents the findings, comparing student and parent responses with data collected from the institutions, and shows the correspondence between the responses of students and their parents. Chapter 4 compares the characteristics of the NPSAS students with those of the college-enrolled sample of the Current Population Survey (CPS). Chapter 5 concludes the report with a summary and discussion of the results.

Overview

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[1] For a detailed description of NPSAS, see U.S. Department of Education, National Center for Education Statistics, *Methodology Report for the National Postsecondary Student Aid Study, 1987*, NCES 90-309, (Washington, D.C.: March 1990).

[2] Ibid., 1.

Most of the studies analyzing the accuracy of self-reported survey data focus on two measures of quality: the *validity* of the data in relation to some true value and the *reliability* of the reported data over time. The *validity coefficient*, therefore, is generally defined as the correlation between the reported data and the "true" value, while the *reliability coefficient* is defined as the correlation between two responses to the same item given by an individual at different times.[3] These measures represent an ideal means of assessment. However, as is often the case, a "true" value does not exist to test the validity of responses. Therefore, when there is more than one group of respondents such as students and parents or, in the case of NPSAS, students, parents, and institutions, a way of assessing the validity of information is to assume that one source of information is accurate and to test the other source against the "correct" one. Although this method does not necessarily ascertain the true value of the information, it does determine whether answers by one type of respondent are consistent with those of another type.

Social scientists often rely on survey data to analyze social experiences. The accuracy of self-reported information obtained from these surveys, however, has often been called into question. Consequently, a substantial literature on the validity and reliability of self-reported survey data has been generated. Most studies have analyzed the accuracy of student responses concerning their school experiences and the socioeconomic characteristics of their family by comparing them with parent responses to similar items. For example, when comparing the responses of students surveyed in High School and Beyond (HS&B), Fetters et al. were able to measure both the reliability and the validity of the student-reported data.[4] In general, the authors found that students reported factual items such as race-ethnicity and parents' educational level with relative accuracy. However, students tended to be less accurate when reporting more subjective information, such as mothers' expectations for educational achievement. One factual item that students seemed to have great difficulty in reporting accurately was family income. This has also been found by other researchers. For example, Kayser and Summers found that although high school students were accurate reporters of their parents' education, they were not good reporters of their father's income.[5]

The results found by Fetters et al. confirm those findings from additional studies on the validity of student reports of family characteristics. In particular, Cohen and Orum found that children as young as age 9 already have an accurate idea of their parents' education level and occupations.[6] In studying the responses of sons concerning the educational attainment and occupations of their fathers, Borus and Nestel concluded that, on average, the children's responses were similar to those of their fathers.[7] Researchers have identified a number of factors that influence the accuracy of student-reported information. These factors include the wording of questions, the specific type of information requested, and the characteristics of the responding students such as age, gender, and race-ethnicity. In general, studies have determined

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[3] For a more comprehensive discussion of validity and reliability, see D. Brinberg and L. Kidder, eds., *Forms of Validity in Research* (San Francisco: Jossey-Bass, 1982); and E. Carmines and R. Zeller, "Reliability and Validity Assessment," *Sage Publications*, Vol. 17 (1979).

[4] U.S. Department of Education, National Center for Education Statistics, W. Fetters, P. Stowe, and J. Owings, *High School and Beyond: A National Longitudinal Study for the 1980's: Quality of Responses of High School Students to Questionnaire Items* (Washington D.C., September 1984).

[5] B. Kayser and G. Summers, "The Adequacy of Student Reports of Parental SES Characteristics," *Sociological Methods and Research*, 1 (5) (February 1973).

[6] R. Cohen and A. Orum, "Parent-Child Consensus on Socioeconomic Data from Sample Surveys," *Public Opinion Quarterly* 36 (Spring 1972).

[7] M. Borus and G. Nestel, "Response Bias in Reports of Father's Education and Socioeconomic Status," *Journal of American Statistical Association* 68 (344) (December 1973): 818.

that older children respond to survey questions more accurately than do younger children. For example, Fetters et al. found HS&B seniors provided more accurate answers than did sophomores. Kerchoff et al. found that the validity of responses increased with the age of the children responding. However, this study also showed that this age-related trend tended to flatten out by the ninth grade.

Students' gender and race–ethnicity have also been found to influence accuracy in reporting family-related information. Fetters et al. found females to be slightly more accurate respondents than males and white students to be somewhat more accurate than black students. Kerchoff et al. found that among younger boys (in the 6th and 9th grades), white students tended to be more accurate respondents than black students, although this discrepancy diminished by the 12th grade.

The way in which questions are asked on a survey plays an important role in how accurately students respond to family-related questions. Specifically, Cohen and Orum discovered that children were able to identify their father's occupation more accurately when the question was open-ended than when the question provided categories from which to choose. Furthermore, this study also showed that questions with few categories resulted in greater response accuracy than questions with many categories, and that items with the option of "I don't know" were reported more accurately than those without such an option.

Finally, the most obvious factor affecting self-reported survey data is the type of information requested. Studies assessing the validity and reliability of self-reported data consistently show that factual information is much more accurately reported than more subjective information. Furthermore, questions that are personally sensitive tend to produce less accurate responses than those that are not. Of particular importance to NPSAS is the fact that among the studies cited in this discussion assessing students' ability to report family income, all found that students are not a good source of this information. This may be the combined result of income being a sensitive item to some students and parents not generally discussing family income with their children.

The students participating in the NPSAS survey were older than those in the surveys cited in this discussion and should be more accurate reporters of family income. However, with its focus primarily on the financial aspects of postsecondary education attendance, the NPSAS survey goes far beyond other education surveys in requesting financially related information. For example, the NPSAS:87 financial aid questions were detailed and often complex and, as reported in the findings of this study, proved to be problematic for many student respondents. The U.S. Department of Education has conducted studies demonstrating that there is often disagreement between the information that families provide on their financial aid applications and the values as reported on their tax returns.[8]

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[8] See the results of the Pell and Title IV Quality Control Studies conducted by Advanced Technology for the Division of Quality Assurance, U. S. Department of Education. In particular, *Quality in the Pell Grant Delivery System, Volume 1-Findings*, Contractor Report, under contract No. 300-80-0952.

Chapter 2

Data and Methodology

NPSAS:87 is a cross-sectional survey of a nationally representative sample of students enrolled in postsecondary education in the fall of 1986.[9] The survey included more than 43,000 students enrolled in over 1,000 postsecondary institutions. The student file contains responses on students' demographic characteristics, their educational experiences and aspirations, the financial situation of both students and their parents, the costs of attending college, and all sources of financial aid. The institutional file contains information on student demographics, family finances, and financial aid. In addition, the parents of a subsample of 27,000 students were surveyed to collect information on educational costs and financing and on family financial, educational, and employment characteristics.[10] Because institutional records do not include family financial information on students who do not receive financial aid, a major objective of the parent survey was to collect this information for students who were financially dependent on their parents but who did not receive financial aid.

Limitations of the Data

There are some factors specifically related to the NPSAS survey that may influence the results of this analysis and should be taken into account when interpreting the findings. These factors, described in greater detail below, include:

- the timing of data collection for the three components of the survey (i.e., institutions, students, and parents) and the effect of long-term recall;
- the complexity of information requested;
- the comparability of information requested from students, parents, and institutions; and
- the limited sample size for many comparisons.

Timing of Data Collection

There were three groups of respondents to the NPSAS:87 survey including institutions, students, and parents. Data were collected from each of these groups at different times. For example, student surveys were mailed in six waves from mid-March through June 1987. Many of the questions asked of the students referred to the fall of 1986. Thus, toward the end of the

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[9] For more information about the design and data collection procedures of the NPSAS:87 data file, see U.S. Department of Education, National Center for Education Statistics, *Methodology Report for the National Postsecondary Student Aid Study, 1987*, Contractor Report, NCES 90-309 (March, 1990).

[10] Parents of financially independent students over 25 years old were not included in the sample.

school year, many students were asked to respond to events that took place at the beginning of the school year.

Institution data, on the other hand, were initially collected between December 1986 and March 1987.[11] Most importantly, however, since financial aid-related information often changes during the academic year, additional *updated* institution data were collected from August 1987 through December 1987. Therefore, information originally supplied to the institution by students and parents or information concerning the amount of financial aid the student received could have changed during the year.

Finally, the parent data were collected in two stages. The surveys were mailed in May, June, and July 1987. Subsequently, between August and December of the same year, parents who did not respond to the mailed survey were telephoned and administered a telephone version of the survey. Given these circumstances, recall may also have been a problem for the parents who were asked to provide information that could have been up to a year old.

Two potential problems arise in using the institution as the point of comparison for student- and parent-reported data. One is the timing itself, in which students and parents were asked to provide detailed financial information relating to a time several months prior to data collection. Second, the institution records were updated to more accurately reflect financial aid information and it is this updated information that constitutes the final institution record for each student.

Complexity of Information

The focus of the NPSAS survey is to provide answers to fundamental questions about student aid including the status of student participation, the impact of financial aid programs on student enrollment and progress, and the impact of changes in financial aid policies on students and program costs.[12] In order to collect comprehensive information on such a large scale, it was necessary to collect data not only from students, but also from the institutions they attended and from a sample of parents. Furthermore, the financial information requested in NPSAS was far more extensive than that reported in previous surveys.

As discussed in the introductory chapter, studies have shown that students (high school age or younger) have difficulty accurately reporting family income. While postsecondary students are older and presumably capable of more accurately reporting on family income, the items requested in NPSAS were far more complex and sometimes required long-term recall as well as financial statements and documentation. In addition, parents may still not discuss their family income even with college age students. Students were asked whether or not they received specific types of student aid such as grants, loans, work-study, fellowships, and so on; who awarded the financial aid (that is, the institution, the state, or the federal government); and the exact amount awarded for the school year. If the students did not have the documents and forms available to fill in this information, it is unlikely that they could accurately recall such detail several months later. In addition to financial aid information, students were also requested to itemize their average total monthly expenses and to further break-out the expenses related directly to their education.

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[11] At this time the registrar data provided the information necessary to locate respondents for the student and parent surveys.

[12] NPSAS:87 *Methodology Report*, 1.

Comparability of Information Collected from Institutions, Students, and Parents

The purpose of collecting data from the three different sources in the NPSAS survey was to provide as complete a picture as possible of how both aided and nonaided students pay for their postsecondary education. By using several data sources, NPSAS collected information on groups that have been systematically excluded from previous studies, such as students who do not participate in financial aid programs. With NPSAS data, therefore, analysts can conduct more in-depth examinations of both the level of need among students and the sources of their educational financing than were possible with previous studies.

Among the three groups of respondents, postsecondary institutions are the best source of data for federal, state, and institutional financial aid awards.[13] Institutions are also likely to be the most accurate source of information on the family finances of students who apply for financial aid because students who receive financial aid must provide the institution with detailed and often verified financial data. The student survey, on the other hand, was crucial for providing information on the financial characteristics of students who did not receive financial aid. Finally, the parent survey was necessary to collect information on financially dependent students who did not receive financial aid. The data collected from the three different sources were, therefore, designed to supplement each other. While some overlapping information was collected, which forms the basis for this analysis, the specific emphasis and wording of the data items were different for each source. (See Appendix D for data items with different wordings.)

Moreover, when there is overlapping information obtained from different types of respondents, just who should be considered the most accurate source of such information depends on what is requested. As discussed above, the institution should be the best source of financial aid information. However, for students not receiving financial aid and who are financially dependent on their parents, it would seem reasonable that parents, not students, would be the best source of family finance information. Students, on the other hand, regardless of their dependency status, might be the best reporters of living expenses and other costs of attending the institution. Consequently, there is no single "standard" group of respondents. Rather than trying to determine the "validity" of the data, this analysis was designed to assess the internal consistency of the NPSAS data reported by three groups of respondents.

Limited Sample Sizes for Comparisons

While about 43,000 students participated in the NPSAS survey, only students who received financial aid (approximately 26,000) had institution financial aid records. In addition, parents were surveyed for only a sample of students. Approximately 22,000 students were initially selected to have their parents surveyed. However, only 13,423 (58 percent) parents responded, among whom, about one-half responded by mail and the other half were contacted and interviewed by phone.[14] The response rate of parents of independent students was particularly low. Many of the overlap items collected from the three sources were only relevant to specific subgroups of students. For example, comparisons regarding actual amounts of financial aid awarded can only be made for those receiving the specific types of aid. Thus, these comparisons were possible for approximately 10,000 students who reported receiving federal aid, about 9,000 students who reported receiving loans, and about the 3,000 students who reported receiving work aid (see table 2.1 for sample sizes for each comparison). Additionally, a number of the financial

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[13] Ibid., 4.

[14] A major reason for parent nonresponse was incomplete address information so that all parents could not be properly located.

items supplied by the students such as personal income, federal taxes, and number of dependents were relevant only for financially independent students.

Finally, in addition to survey non-response, item non-response was a problem for some of the variables examined. This was especially true of the parent survey, in which 33 percent of parents did not report adjusted gross income and 44 percent did not report federal income taxes paid.

Methodology

Comparisons of Responses

To assess the internal consistency of the information furnished by the three groups of respondents in NPSAS—students, parents, and institutions—three comparisons were made:

- student responses and institution data;
- parent responses and institution data; and
- student and parent responses.

The variables compared in each analysis are listed in table 2.1. The student–institution comparisons include student characteristics; financial items such as income; and financial aid receipt and awards. When comparing student information with institutional records, it was assumed that with respect to student characteristics items, students and institutions reported information with equal accuracy. However, with respect to information on financial aid, it was assumed that the institutional records were more accurate.

Five comparisons of parent responses with institutional data were possible using the NPSAS data. These included number of dependents, number of dependents in college, parents' adjusted gross income (AGI), federal income tax, and tuition and fees. It was assumed that both groups would provide equally accurate information about the number of dependents. For variables regarding the financial aspects of the family, however, it was assumed the institutions' records were more accurate since this information is used for awarding financial aid and therefore must be verifiable.

Table 2.1—NPSAS:87 variables used for analyzing the quality of responses

Student—Institution Comparisons	Included[1]	N	
Student characteristics (all students)			
Age	A	41,776	
Sex	A	43,037	
Race-ethnicity	A	42,793	
Marital status	A	43,176	
Type of HS degree	A	42,117	
Year of HS degree	A	23,325	
Student residence	A	43,130	
Dependency status	A	43,176	
Family and student financial items			
Parents' income	F/D	14,137	
Student's income	F/I	3,811	
Federal taxes	F/I	1,890	
Number of dependents	F/I	3,862	
Financial aid receipt and amount			
Received federal aid (Y/N) and amount	F	26,312[2]	10,504[3]
Received grant aid (Y/N) and amount	F	26,312[2]	9,465[3]
Received work aid (Y/N) and amount	F	26,312[2]	2,921[3]
Received loan aid (Y/N) and amount	F	26,312[2]	8,972[3]
Tuition and fees	A	24,896[2]	
Parent—Institution Comparisons			
Number of dependents	P/F/D	2,072	
Number of dependents in college	P/F/D	2,031	
Parents' adjusted gross income (AGI)	P/F/D	1,370	
Parents' federal income tax	P/F/D	1,173	
Tuition and fees	P/D	7,545	
Student—Parent Comparisons			
Parent's education			
Mother's education	P	10,130	
Father's education	P	9,108	
Family financial items			
Parents' income (categorical response)	P		
Claimed as tax exemption	P	11,121	
Number of weeks lived at home	P	5,461	
School costs			
Tuition and fees	P	7,545	
Room and board	P	6,681	
Student aid items			
Ever apply for financial aid (Y/N)	P	11,121	
Did parents contribute to education expenses	P	11,121	
Amount parents contributed	P	7,406	
Amount loaned by parents	P	7,400	

[1] A=all students, D=dependent students, I=independent students, F=received any financial aid, P=parents responded.
[2] Number of student—insitution pairs where at least one respondent reported receipt of financial aid.
[3] Number of students receiving specific financial aid and who reported amount.

The final set of comparisons, between students and parents, is more typical of previous analyses that assessed the quality of self-reported survey data. In this study, parents' responses were considered the standard against which students' responses were compared for demographic and family financial items. Both students and parents, however, were assumed to be equally reliable when reporting tuition and fees, room and board, and whether or not the student had ever applied for financial aid.

Comparison by Subgroups

As discussed in chapter 1, previous studies indicate that the quality of responses to surveys may be affected by a variety of student characteristics such as gender, age, race-ethnicity, and socioeconomic status. Table 2.2 lists all the attributes including student, family, and institution characteristics, as well as the method of data collection, that were examined in detail for their associations with the consistency of responses in the NPSAS survey.

Table 2.2—Subgroups used for analyzing quality of responses[15]

Institution-related information
Institutional type
Attendance status
Dependency status
Student and family characteristics
Gender
Race-ethnicity
Dependent family income
Independent student income
Data collection
Mail or telephone survey

Statistical Measures of Correspondence between Responses

Several statistical methods can be used to assess the correspondence between two sets of responses. The most commonly used method is that of statistical correlation, which computes the correlation coefficient between two sets of responses. For variables measured on an interval or ordinal scale such as parents' education and number of siblings, a Pearson's product moment correlation coefficient (r) is employed. For variables on a nominal scale such as race-ethnicity, the statistic called Cramer's V is used.[16] Both r and V can reach a maximum value of 1, and for dichotomous variables, V equals r.

$$V=\sqrt{(X^2/(N \cdot \min(I-1, J-1)))}$$

where N = number of observations
I = number of categories for variable i
J = number of categories for variable j

Depending on the distribution of the data, other methods of assessment may be more useful. For example, if the data are highly skewed (an example might be if 90 percent of respondents answered "no" to a question and 10 percent answered "yes"), examining the percentage of matched pairs might be a more useful measure of correspondence than the

[15] Correlations for a number of other subgroups including student's age by academic level are listed in appendix C.

[16] M.G. Kendall and A. Stuart, *The Advanced Theory of Statistics, Vol. 2* (New York: MacMillan, 1979).

correlation.[17] Overall, however, it was determined that correlation would be the most illustrative method of measuring the correspondence in the NPSAS data.

Measurement of Bias

Bias may be related to measures of the correspondence between two sets of respondents. Student responses, for example, may correlate with parent responses, yet may systematically under- or over-estimate the value of a specific variable. For example, there may be a strong correlation between the two groups' estimation of parental expectations regarding the student's education, yet students may systematically report lower expectations than do their parents.

In the Fetters et al. report on the quality of responses in HS&B, bias was defined as the difference in response means of parents and students:

$$BIAS = \frac{\sum_{i=1}^{n} x_i}{n_i} - \frac{\sum_{i=1}^{n} y_i}{n_i}$$

where x_i = the parent response to variable i,
y_i = the student response to variable i, and
n_i = the number of student-parent pairs for variable i.

While a positive bias was associated with overreporting by the student, a negative bias was associated with student underreporting. In this study, the level of bias is reported for all the correlations of variables that are dollar values. Bias is presented in two ways—the mean difference in amount and the percentage difference between the two values.

[17] See appendix B for a discussion and comparison of the correlation coefficient versus the percentage of matched pairs.

Chapter 3

Findings and Results

Student–Institution Comparisons

The first set of comparisons in this section examines the consistency of the student and institution responses concerning demographic information. For this information, both groups of respondents were assumed to be equally reliable in reporting such items. The second set of comparisons concerns family financial items and financial aid items. For reasons discussed in chapter 2, the institutional data for these items were considered the standard against which the student responses were compared.

Demographic Items

Table 3.1 shows the correlation between the student and institution responses to demographic items. As would be expected, the correlations for such variables were quite high, ranging from .75 for race–ethnicity to .97 for age and sex. Overall, the mean correlation was .88 for these variables, well within the range of values found in other studies.

Family Financial Items

The next set of variables, also shown in table 3.1, describes family financial characteristics. The mean correlation for these variables was .63, with the lowest correlation being for parents' income (.33) and the highest for independent student's income (.82). The relatively low correlation for parents' income is consistent with previous studies showing students as relatively inaccurate reporters of their parents' income. Independent students' income, on the other hand, was highly correlated with the institution's record. Independent students, however, were not as accurate in reporting their federal income tax (.60) as they were their income.

Table 3.1—Correlation between student and institution responses to various NPSAS:87 questionnaire items

Variable	Correlation coefficient
Demographic items:	
Age	.97
Sex	.97
Race–ethnicity	.75
Marital status	.81
Type of high school degree	.81
Year of degree	.96
Student residence	.84
Dependency status	.90
	Mean = .88[1]
Family financial items:[2]	
Parent's income	.33
Independent student's income	.82
Independent student's federal income tax paid	.60
Number of dependents	.66
	Mean = .63
Student aid-related items: (Y/N)	
Received grant aid	.13
Received work aid	.14
Received loan aid	.17
Received federal aid	.13
	Mean = .14
Student aid-related items: (dollar amount)	
Amount of grant aid	.24
Amount of work aid	.02
Amount of loan aid	.52
Amount of federal aid	.25
Tuition and fees	.59
	Mean = .38

[1] Means are computed using the squared values of the coefficients.
[2] The amount of students' savings was originally intended to be in the analysis. However, there were several hundred cases that seemed to be outliers where students reported having more than $100,000 in savings, a 900 percent overestimate of what the institution reported. This appeared to be a significant problem, the reason for which is unclear.

Student Financial Aid Items

The next two groups of variables are correlations for financial aid-related variables. The first group constitutes responses to yes-no questions indicating whether or not a student received a particular type of aid. The second group of variables refers to the amount of aid students received and the amount paid for tuition and fees.

These findings clearly demonstrate NPSAS students were not accurate reporters of whether or not they received a specific type of financial aid. The correlations ranged from .13 to .17. A further examination of the data revealed that institutions reported a student receiving aid much more often than did the student. It is not clear why there is such underreporting by students. As previously discussed, the fact that students need documentation to accurately answer such questions may be a problem. It may also be that students who receive aid from two or more sources may only report one source.

The correlations between students and institutions for the actual amount of aid received were higher than the correlations for the receipt of aid. One exception to this was the amount of work aid received, a correlation of only .02. Unlike the other types of aid, however, the amount of work aid paid to a student may vary during the year. For example, in the beginning of the year a student may be awarded a certain number of hours of work, but the student may actually work fewer hours than were awarded. Even for those students who try to report the amount paid for hours worked, if they were surveyed before the end of the year, they would still be estimating the amount. The institution, on the other hand, had updated employment records at the time of the institution record update.

The correlation for the amount of loan aid received (.52) was the highest among the amounts reported for all the types of aid. This may be due to several factors. Regulations require institutions to spend time counseling a student about student loans and the importance of loan repayment. In addition, the application process for a loan is more involved than it is for a grant, and, thus, a student may be more likely to remember the amount awarded. Finally, in many instances, the loan amounts are awarded in round dollar amounts, making it simpler for students to remember the amount of their loan.

Bias in Student Reporting

Table 3.2 shows the level of bias in student reporting for both the amounts of family financial items and the amount of financial aid awarded. An asterisk indicates that the difference in the average amounts reported between students and institutions is statistically significant. For significant differences, a negative value reflects underreporting of the amount on the part of the students, and a positive value indicates overreporting.

Among the family financial items, students tended to slightly overestimate the amount of federal income tax paid compared to the institution's record. For student financial aid items, however, students consistently underreported the amount of aid received. The differences ranged from almost $600 for grant aid, a 22 percent difference, to more than $1,400 for work aid, a 76 percent difference. Among the various types of aid awarded, students were much more accurate in reporting the amounts of loan aid they received than they were other types of aid.

Table 3.2—Bias between student responses and institution data for amounts of family financial items and student financial aid requested in NPSAS:87

Variable	Mean difference	Percentage
Family financial items:		
Parent's income	$1	0
Student income	118	1
Federal tax paid	67*	7
Student aid items:		
Grant aid	$-597*	22
Work aid	-1,407*	76
Loan aid	-633*	16
Federal aid	-1,355*	32

*Significant at the 5% level.

Analysis by Subgroups

In order to examine the consistency of responses between students and institutions for various subgroups, the correlations for the items within each of the four groups of comparisons—demographic, family financial items, receipt of financial aid (y/n), and financial aid amount—were averaged. These average correlations are presented for each subgroup. In addition, the student bias for reporting financial aid-related information is also presented for each subgroup.

Institution-related items.

Table 3.3a shows the correlation for the four groups of variables by institutional type and control. Overall, the demographic variables showed little variation across institutional types. The lowest correlation was .83 for students in private for-profit less-than-4-year institutions, and the highest was .87 for public less than 4-year students.

While not as highly correlated as the demographic variables, the family financial data were also relatively consistent across institutional types, with the possible exception of public less-than-4-year students. The correlation for these students was .58.

Unlike demographic and family financial data, the correlations for receipt of student financial aid, on the other hand, varied across types of institutions, ranging from .08 for public 4-year students to .19 for public less-than-4-year students. Students attending different types of institutions also varied in their accuracy in reporting the amount of aid received. The lowest correlation (.16) was found for students at less-than-4-year private for-profit institutions, while the correlations across the other types of institutions ranged from .23 for students at public less-than-4-year institutions to .35 for students at private 4-year institutions.

The student bias for reporting the amount of financial aid received also tended to vary across institutional types, in particular, between students attending either public 4-year institutions or public less-than-4-year institutions (table 3.3b). Public less-than-4-year students underreported the amount of their grant aid by about 15 percent, compared with 31 percent underreporting for public 4-year students. The reverse was true, however, for the reporting of loan aid, where 4-year students underreported the amount by about 21 percent, compared with 35 percent for public less-than-4-year students.

Table 3.3a—Average correlation between student and institution responses for various groups of NPSAS:87 questionnaire items, by institutional type and control

Institution type	Demographic	Family financial	Student aid (receipt)	Student aid (amount)
Public 4-year	.86	.66	.08	.34
Public less-than-4-year	.87	.58	.19	.23
Private 4-year	.86	.63	.13	.35
Private less-than-4-year	.85	.71	.12	.28
Private for-profit-4-year	.84	.73	.10	.30
Private for-profit lt-4-year	.83	.63	.11	.16

Table 3.3b—Bias between student responses and institution data for amounts of student financial aid requested in NPSAS:87, by institutional type and control

Institution Type	Grant aid		Work aid		Loan aid		Federal aid	
	Mean diff.	Percent	Mean diff.	Percent	Mean diff.	Percent	Mean diff.	Percent
Public 4-year	$-604*	31	$-1,701	83	$-675*	21	$-1,321*	36
Public less-than-4-year	-198*	15	-1,257*	75	-706*	35	-514*	24
Private 4-year	-738*	19	-1,229*	73	-899*	20	-2,084*	42
Private less-than-4-year	-278*	11	-646*	76	-490*	21	-694*	24
Private for-profit-4-year	-925	43	—	—	-135	5	-410	11
Private for-profit lt-4-year	-471*	23	-3,948*	-95	-84	3	-381*	11

— Sample too small for reliable estimate.
*Significant at the 5% level.

Attendance and dependency status.

Table 3.4a shows the correlations for the four groups of variables by attendance status and dependency status. Whether or not a student attended full time or part time had little relationship with the consistency of their responses in relation to the institution's response. The same was true for dependency status, with the exception of the correlation for family financial items, in which dependent students had a correlation of only .33 compared with .70 for independent students. The relatively low correlation for dependent students was primarily due to their inaccurate reporting of parents' income. Independent students, on the other hand, reported their own income.

Full- and part-time students did tend to differ with respect to their bias in reporting the amount of financial aid they received (table 3.4b). For example, part-time students showed no bias in reporting grant aid, whereas full-time students underestimated the amount they received by about 23 percent or $654. Part-time students, however, did underreport their federal aid, but only by about 21 percent, compared with about 35 percent for full-time students.

Table 3.4a—Average correlation between student and institution responses for various groups of NPSAS:87 questionnaire items, by attendance and dependency status

	Demographic	Family financial	Student aid (receipt)	Student aid (amount)
Attendance status				
Full time	.85	.63	.13	.23
Part time	.86	.67	.12	.29
Dependency status				
Dependent	.86	.33	.13	.37
Independent	.82	.70	.16	.40

Table 3.4b—Bias between student responses and institution data for amounts of student financial aid requested in NPSAS:87, by attendance and dependency status

	Grant aid		Work aid		Loan aid		Federal aid	
	Mean	Pct	Mean	Pct	Mean	Pct	Mean	Pct
Attendance status								
Full time	$-654*	23	$-1,356*	71	$-649*	4	$-1,422*	35
Part time	-3	0	-2,577*	91	-448*	3	-626*	21
Dependency status								
Dependent	-549*	33	-1,111*	68	-501*	24	-1,125*	41
Independent	-691*	51	-2,348*	90	-854*	39	-1,720*	54

*Significant at the 5% level.

In general, the bias in reporting the amount of aid they received was greater for independent students than for dependent students. For example, independent students underreported the grant aid they received by about 51 percent compared with 33 percent for dependent students. In part, this result may be due to the fact that independent students received on average relatively larger amounts of aid.

Demographic characteristics.

Table 3.5a shows the correlations between students and institutions for selected demographic characteristics. Unlike previous studies that showed females were somewhat more accurate reporters of items in education surveys than males, no such differences were found for the items examined in the NPSAS survey. Males and females exhibited about the same level of consistency regardless of the item. The same was true for race-ethnicity, with the possible exception of family financial items. For these items, white students had the lowest correlation (.57), while Asian students had the highest (.70).

Table 3.5a—Average correlation between student and institution responses for various groups of NPSAS:87 questionnaire items, by selected student characteristics

	Demographics*	Family financial items	Student aid (receipt)	Student aid (amount)
Total				
Gender				
Male	.86	.61	.14	.39
Female	.87	.55	.14	.37
Race-ethnicity				
Native American	.83	.63	.16	.38
Asian	.82	.70	.13	.43
Black	.81	.61	.15	.36
Hispanic	.84	.68	.16	.39
White	.84	.57	.14	.39
Parents' income (dep.)				
Lt $12,000	.80	—	.14	.35
$12,000–24,000	.79	—	.12	.37
$24,000–30,000	.81	—	.11	.38
$30,000–50,000	.78	—	.10	.35
$50,000–75,000	.84	—	.12	.33
$75,000–100,000	.88	—	.11	.36
$100,000 plus	.91	—	.16	.37
Students' income (ind.)				
Lt $5,000	.80	—	.13	.38
$5,000–10,000	.81	—	.12	.42
$10,000–15,000	.82	—	.10	.42
$15,000–20,000	.81	—	.11	.47
$20,000 plus	.83		.09	.38

— Correlation not reported because row variable was one of only 3 items for this group.
* Average correlation of demographic items other than row variable.

No obvious differences in the consistency of reporting demographic information were found for students at various income levels. While students in the highest income levels had the highest correlations (.91 for dependent students' parents' income of $100,000 or more and .83 for independent students' income of $20,000 or more), the level of consistency was quite high across all levels of income. There were also no apparent differences for the other two groups of items—student aid receipt and student aid amount—in relation to income level.

The level of bias students exhibited in reporting amounts of financial aid received is shown in table 3.5b according to demographic subgroups. As was true for the correlations, no gender differences in the level of reporting bias were found. Some variations in bias, however, were observed for race-ethnicity and for income level. For example, Asian students showed no bias in reporting the amount of loan aid received, and a relatively low level of bias for reporting grant aid (23 percent underreporting). White students also had a relatively low level of bias in reporting grant aid (17 percent underreporting) compared with other racial-ethnic groups (bias ranging from 23 percent to 56 percent underreporting).

There was no general pattern to the variation of bias observed for students at various income levels, although students in the lowest income levels tended to have the greatest bias in reporting amounts of financial aid received. These students, however, are also more likely to receive higher awards than higher income students and, thus, the possibility of biased reporting is higher for low-income students.

Table 3.5b—Bias between student responses and institution data for amounts of student financial aid received in NPSAS:87, by selected student characteristics

	Grant aid		Work aid		Loan aid		Federal aid	
	Mean diff.	Percent	Mean diff.	Percent	Mean diff.	Percent	Mean diff.	Percent
Gender								
Male	$-656*	22	$-1,611*	79	-660*	16	$-1,565*	36
Female	-554*	21	-1,233*	75	-610*	19	-1,186*	37
Race-ethnicity								
Native American	-1,875*	56	-1,230	75	-588	18	-980*	26
Asian	-834*	23	-2,059*	79	-137	4	-1,511*	35
Black	-921*	33	-1,069*	75	-501*	18	-1,212*	32
Hispanic	-1,155*	40	-1,624*	92	-505*	15	-1,366*	35
White	-454*	17	-1,403*	77	-686*	19	-1,378*	34
Parents income (dependent students)								
Lt $12,000	-1,338*	42	-953*	74	-306*	11	-1,464*	38
$12,000–24,000	-812*	27	-966*	74	-549*	19	-1,231*	34
$24,000–30,000	-686*	24	-963*	75	-668*	21	-1,175*	36
$30,000–50,000	-54	2	-1,003*	74	-625*	19	-791*	23
$50,000–75,000	500*	19	-828*	61	-194	5	-830*	22
$75,000–100,000	1,037	34	—	—	-1,228*	22	-1,494*	28
$100,000 plus	—	—	—	—	658	18	-1,600*	34
Student's income (independent students)								
Lt $5,000	-890*	35	-1,796*	84	-1,177*	28	-2,418*	49
$5,000–10,000	-389*	17	-1,618*	72	-902*	22	-1,678*	38
$10,000–15,000	-446*	22	-3,083*	98	-755*	19	-1,120*	28
$15,000–20,000	-309*	17	-3,191*	91	1,273*	28	-1,630*	37
$20,000 plus	-296	18	-4,306*	90	-788*	17	-1,575*	35

— Sample too small for reliable estimate.
*Significant at the 5% level.

Parent–Institution Comparisons

This section examines the consistency between dependent students' parents and institution responses to items related to parents' income, federal taxes paid, tuition and fees, number of dependents, and number of dependents in college. Due to the verification required to document the financial need of students applying for financial aid, the institution records were assumed to be more accurate than the parent responses for these comparisons.

The correlations between parent and institution responses for number of dependents, adjusted gross income, and federal taxes paid were relatively high, ranging from .76 for federal taxes paid to .83 for adjusted gross income (table 3.6). The somewhat lower correlation for the number of dependents in college (.65) could possibly be due to the different ways in which the question was asked of the institution and the parents. Parents were asked about their dependents in two parts. Part one asked how many people will

> you and your spouse support between September 1986 and May 1987? Include yourself, your spouse, other children, and any others receiving more than half their support during that period. Do **not** include your child who is in our survey.

Part two then asked:

> Of these, how many have been enrolled in postsecondary school....Please include your spouse, if applicable, but do **not** include yourself.[18]

Thus, the first part of the question excludes the student in the survey. The second part should also exclude the participating student, but the responding parents are not reminded of this and, in addition, the second question also excludes the responding parent if he or she is enrolled in postsecondary education. The institution, on the other hand, was asked for the "total number in household in college." By subtracting 1 from this number, it should correspond to the parents' response unless the responding parent was also enrolled in postsecondary education. Thus, the complexity of the question asked of the parent may have contributed to the lower correspondence between parent and institution responses.

Table 3.6—Correlation and the level of bias between parent and institution responses for various NPSAS:87 items

Variable	Correlation	Bias (mean difference in amount)	Percent
Number of dependents	.79	0	1
Number in college	.65	0	26
Adjusted gross income	.83	$255	1
Tuition and fees	.65	1,604*	63
Federal taxes paid	.76	365*	10

*Significant at the 5% level.

[18] NPSAS:87 *Methodology Report*, Appendix A, Parent Questionnaire, 11.

It was less surprising to see the lower correlation between parents and institution for the amount of tuition and fees. Unless they directly paid the tuition and fees or had the documentation in hand, one would be less inclined to think that the responding parent could recall the exact amount of tuition and fees paid to the school for the 1986–87 school year. The same is true, to a lesser extent, for the amount of federal income taxes paid.

The only systematic biases observed for parent responses when compared to the institution data were for tuition and fees and the amount of federal taxes paid. In general, parents considerably overestimated (by about 63 percent) the amount of tuition and fees paid to the institution. Parents' bias in overreporting their federal taxes, though statistically significant, was much lower (about 10 percent) than for tuition and fees.

Analysis by Subgroup

Correlations between parents and institutions for number of dependents, adjusted gross income, federal income taxes, and tuition and fees are presented in table 3.7 for selected subgroups. When examining these differences, however, it should be remembered that the parent survey was plagued by substantial item non-response. This was especially true for adjusted gross income (35 percent missing) and federal income tax paid (40 percent missing). Thus, when these responses are broken down into subgroups, the correlations often represent a relatively small number of respondents.[19]

[19] While the total Ns for each item are listed in table 2.1, the individual cell sizes for the categories in table 3.7 can be found in appendix B. It is not uncommon for some cell sizes, especially for adjusted gross income and federal taxes paid, to be under 100. However, if the cell size dropped below 30, the correlation is not shown.

Table 3.7—Correlation between parent and institution responses for family financial items and tuition and fees paid, by selected characteristics

	Number of dependents	Adjusted gross income	Federal taxes	Tuition and fees
Institution type and control				
Public 4-year	.81	.86	.80	.42
Public less-than-4-year	.84	.74	.45	.16
Private 4-year	.84	.80	.74	.46
Private less-than-4-year	.72	.79	.83	.48
Private for-profit 4-year	—	—	—	—
Private for-profit less-than-4-year	.70	.81	.77	.31
Attendance status				
Full-time	.80	.83	.76	.64
Part-time	.73	.90	.80	.46
Student's race–ethnicity				
Native American	—	—	—	.77
Asian	.82	.96	.91	.72
Black	.60	.91	.87	.41
Hispanic	.75	.45	.87	.65
White	.86	.84	.75	.65
Parents' adjusted gross income				
Less than $12,000	.68	-	.11	.46
$12,000–24,000	.85	-	.19	.55
$24,000–30,000	.85	-	.31	.57
$30,000–50,000	.86	-	.54	.52
$50,000–75,000	.86	-	.56	.54
$75,000–100,000	—	-	—	—
$100,000 and over	—	-	—	—
Parents' highest education				
Less than high school	.69	.59	.80	.56
High school only	.84	.81	.82	.57
Vocational school	.75	.91	.67	.61
2-year degree	.80	.89	.88	.59
4-year degree	.80	.79	.74	.69
Advanced degree	.89	.78	.63	.67
Method of data collection				
Mail	.80	.88	.75	.68
Telephone	.78	.69	.79	.61

- Item included in correlation.
— Sample too small for reliable estimate.

In general, the correlations between parent and institution responses tended to be lower for low-income parents, especially those with incomes under $12,000. No other obvious patterns emerged, though some singular differences were notable. For example, parents of black students tended to be less accurate than other parents in reporting number of dependents (.60) and tuition and fees (.41), while parents of Hispanic students appeared to be less accurate reporters of adjusted gross income (.45). On the other hand, parents of white students tended to be less accurate in reporting federal income taxes paid than parents of minority students (.75 compared with .87 or higher).

With regard to the amount of tuition and fees paid, the correlation between parents of students in public less-than-4-year institutions and the institution was especially low (.16). This is not surprising, however, since students in public less-than-4-year institutions often attend school part-time. Therefore, their tuition and fees would be related to the number of courses or units taken rather than a flat fee for full-time attendance. Related to this was the lower correlation for tuition and fees observed for parents of part-time students (.46) relative to parents of full-time students (.64).

Though the telephone survey was very successful in surveying the considerable number of parents who did not respond to the mailed survey, this method of data collection did not seem to be associated with more accurate responses to the questionnaire items examined in this analysis. With the possible exception of adjusted gross income, the correlations for each method of data collection were relatively close. In the case of income data, where the correlation for the parents who responded by mail was .88 compared with .69 for those who were interviewed by telephone, it is possible that parents who responded by mail took the time to refer to their tax forms to report their adjusted gross income, while the parents surveyed by phone may have relied more on their memory.

Bias.

It is clear from the bias estimates shown in table 3.8 that, regardless of subgroup attributes, parents consistently overestimated the amount of tuition and fees paid. It is probable that they included other expenses in the amount they reported. This would be especially be true for parents who did not directly pay tuition and fees to the institution, but provided a certain amount of money to the participating student, for tuition and fees as well as other expenses such as books, room and board, transportation, and so on.

There was no obvious systematic bias for the subgroups examined between parent and institution responses for adjusted gross income or for federal taxes paid. Overall, there was a slight overestimate of federal taxes paid (about 10 percent) for parents participating in either the mail or the telephone survey.

Table 3.8—Bias between parent responses and institution data for adjusted gross income, federal taxes paid, and tuition and fees

	Adjusted gross income		Federal taxes		Tuition and fees	
	Mean Difference	Percent	Mean Difference	Percent	Mean Difference	Percent
Institution type and control						
Public 4-year	$837	3	$309	10	$1,093*	97
Public less-than-4-year	903	5	933	55	592*	183
Private 4-year	-172	1	380	9	2,864*	67
Private less-than-4-year	380	2	231	9	1,583*	68
Private for-profit 4-year	—	—	—	—	—	—
Private for-profit less-than-4-year	-503	3	219	12	185	5
Attendance status						
Full-time	309	1	370*	10	1,684*	59
Part-time	-799	3	172	7	1,029*	121
Student's race-ethnicity						
Native American	—		-223	7	967*	55
Asian	72	0	733	28	2,000*	72
Black	-887	5	476	27	945*	43
Hispanic	793	4	92	5	1,156*	47
White	420	1	361	9	1,652*	64
Parents' adjusted gross income						
Less than $12,000	-	-	153	75	616*	24
$12,000-24,000	-	-	709*	67	1,295*	46
$24,000-30,000	-	-	225	10	1,175*	38
$30,000-50,000	-	-	81	2	1,549*	45
$50,000-75,000	-	-	308	4	2,039*	48
$75,000-100,000	-	-	—	—	—	—
$100,000 and over	-	-	—	—	—	—
Parent's highest education						
Less than high school	-1,472	12	43	3	790*	44
High school only	102	0	287	10	1,223*	65
Vocational school	100	0	292	10	1,214*	64
2-year degree	1,113	4	186	4	1,428*	70
4-year degree	1,668	4	471	9	1,802*	71
Advanced degree	-375	1	917	15	2,399*	81
Method of data collection						
Mail	478	2	364*	10	1,398*	56
Telephone	-227	1	366*	10	1,950*	74

- Item used in correlation.
— Sample too small for reliable estimate.

Parent–Student Comparisons

The third and final analysis compared the consistency of student and parent responses to questions concerning parents' highest level of education, family financial characteristics, education expenses, and parents' contributions toward education expenses. Two of the family financial items represent characteristics that determine whether or not a student is financially dependent. These items ask if the student was claimed as an exemption for tax purposes and how many weeks the student lived in the family home in 1986. For this analysis, it was assumed that parents would be more accurate than students in reporting parents' highest level of education and items concerning parents' contributions to the participating students' education. Students, on the other hand, were presumed to be more accurate reporters of their educational expenses such as tuition and fees and room and board.

The correlations between student and parent responses for parents' highest level of education were .63 for mother's education and .69 for father's education (table 3.9). These correlations are somewhat lower than one might expect for factual demographic characteristics. However, the question asked not only for the level of education (such as less than high school, high school, vocational training, college, and so on) but the number of years of postsecondary training for parents who had not earned a baccalaureate or advanced degree. While students' may easily know the general level of their parents' education, they may not know much detail about the length of training for parents who did not obtain a college degree.

Table 3.9—Correlation between student and parent responses to various NPSAS:87 questionnaire items

Variable	Correlation
Demographics	
Mother's education	.63
Father's education	.69
Family financial items	
Parents' income (categorical)	.27
Number of weeks lived at home	.87
Claimed as an exemption	.36
School expenses	
Tuition and fees	.64
Room and board	.20
Ever apply for aid	.41
Parent financial contributions	
Amount parents lent to student for education	.17
Amount parents contributed (non-loan)	.54

As was true for the correlation between student and institution responses regarding parents' income, the correlation between student and parent responses for the same item was low (.27). Similarly, students did not necessarily know whether or not their parents had claimed them as an exemption on their 1986 tax return (.36). This again reinforces the idea that students often do not know their parents' financial status. The only correlation that was high among the family financial items examined in this analysis was for the number of weeks students lived in the family home (.87).

While students and parents had moderate agreement for the amount of tuition and fees paid (.64), they had relatively poor agreement for the cost of room and board (.20). However, parents who did not pay the institution directly for tuition and fees and other expenses, but who provided the students with a certain amount of money to cover expenses, may not know exactly how that money was distributed. The relatively low correlation for whether or not the student had applied for financial aid (.41) is more surprising, the reasons for which are unclear. It would seem likely that parents would know whether or not their child had applied for financial aid, especially for parents of financially dependent students who would have to provide the institution with information regarding their financial status if the student applied for financial aid.[20]

The pattern of parent and student responses regarding how much money parents either contributed or lent to the student is notable. Overall agreement was quite low for the amount of money parents lent the student (.17), while agreement for the non-loan amount contributed was higher (.54). It seems that students were more likely to underreport the amount of money their parents lent them by about 41 percent, and overreport the amount of money their parents contributed (not loans) to their education, by about 19 percent (table 3.10).

Table 3.10—Bias between student and parent responses for school expenses and parent loans and contributions to educational expenses

Variable	Mean difference	Percent
Tuition and fees	$-1,427*	38
Room and board	-771*	75
Amount parents lent to student	-248*	41
Amount parents contributed	930*	19

*Significant at the 5% level.

Analysis by Subgroup

Correlations between students and parents for specific subgroups concerning the financial items included in this analysis are shown in table 3.11. In general, the correlation between students and parents for those enrolled in public less-than-4-year institutions was lower than for students who attended other institutions. As discussed previously, however, a greater percentage of part-time students attend public less-than-4-year institutions, and, therefore, expenses would generally be more variable than expenses for full-time students. In contrast, there was somewhat greater agreement between students and parents among those attending private not-for-profit and public 4-year institutions as well as for students attending private for-profit less-than-4-year institutions. These institutions primarily have full-time students with a standard rate for tuition and fees.

[20] While it was true that the correlation between students and parents was lower for independent students (.33), the correlation between dependent students and their parents was only .49 (data shown in appendix C).

Table 3.11—Correlation between student and parent responses for education expenses, parent loans, and parent contributions, by selected subgroups

Subgroups	Tuition and fees	Room and board	Parent loans	Parent total contribution
Institution type and control				
Public 4-year	.46	.16	.19	.43
Public less-than-4-year	.27	.06	.17	.32
Private 4-year	.49	.17	.16	.49
Private less-than-4-year	.58	.26	.10	.47
Private for-profit 4-year	—	—	—	—
Private for-profit lt-4-year	.32	.01	.24	.52
Attendance status				
Full-time	.63	.18	.17	.54
Part-time	.58	.17	.25	.44
Parent adj. gross income				
Less than $12,000	.48	.12	.01	.57
$12,000–24,000	.48	.13	.31	.38
$24,000–30,000	.61	.15	.24	.49
$30,000–50,000	.60	.17	.07	.56
$50,000–75,000	.50	.09	.08	.56
$75,000–100,000	—	—	—	—
$100,000 and over	—	—	—	—
Student income				
Less than $5,000	.49	.29	.56	.25
$5,000–10,000	.40	.14	.56	.42
$10,000–15,000	.76	-.02	.10	.38
$15,000–20,000	.47	-08	—	—
$20,000 and over	.42	.12	—	—

— Sample too small for reliable estimate.

Full-time students tended to have greater agreement with their parents regarding the amount of tuition and fees and the amount their parents contributed to their education expenses than did part-time students. Part-time students, on the other hand, tended to have greater agreement with their parents concerning the amount of money their parents lent them for education expenses.

Agreement between parents and students according to income level appeared highly variable. With regard to tuition and fees, however, agreement tended to be greater for middle-income groups (e.g., parents earning $24,000 to $50,000 and students earning $10,000 to $15,000) than they were for lower or higher income groups.

Bias.

Table 3.12 shows the amount of bias between students and parents among various subgroups as a percentage of the parent response for each variable. Regardless of subgroup, on average, students reported lower amounts than parents for tuition and fees, amount paid for room and board, and the amount of money parents lent to students. This was especially true for room and board, where students underreported parents from 48 percent to 86 percent. Bias for the non-loan amount of money parents contributed to students' education was in the opposite direction. However, students generally reported greater amounts contributed than did their parents.

Table 3.12—Bias between student and parent responses for education expenses, parent loans, and parent contributions as a percentage of parent response, by selected subgroups

Subgroups	Tuition and fees	Room and board	Parent loans	Total parent contribution
Institution type and control				
Public 4-year	-51*	-77*	-39*	23
Public less-than-4-year	-57*	-48*	-68*	70
Private 4-year	-37*	-76*	-39*	12
Private less-than-4-year	-32*	-82*	-55*	25*
Private for-profit 4-year	—	—	—	—
Private for-profit lt-4-year	-2	-56	-31*	28*
Attendance status				
Full-time	-37*	-76*	-42*	-19*
Part-time	-49*	-68*	-31*	-21*
Parent adjusted gross income				
Less than $12,000	-22*	-58*	-52	8
$12,000–24,000	-39*	-83*	-28	35*
$24,000–30,000	-25*	-70*	-28	25*
$30,000–50,000	-34*	-72*	-45*	20*
$50,000–75,000	-29*	-86*	-33	4
$75,000–100,000	—	—	—	—
$100,000 and over	—	—	—	—

— Sample too small for reliable estimate.
* Difference between parent and student response significantly different at the .05 level.

Chapter 4

Comparison of NPSAS:87 and CPS Data

Even though NPSAS is the most comprehensive survey of postsecondary students and their finances, it is not the only survey concerning postsecondary education. Other large surveys do include information on postsecondary students, but often as a subset of a larger population of students. For example, High School and Beyond (HS&B) is a longitudinal survey of 1980 high school seniors and sophomores that includes their postsecondary experiences in follow-up surveys. Another postsecondary education survey is the Integrated Postsecondary Education Data System (IPEDS). However, IPEDS is an institutional-based survey in which institutions report on revenues and expenditures and on enrollment of various types of students. In addition, there are surveys of the general population that contain information on students in postsecondary education. The most comprehensive of these surveys are the Current Population Survey (CPS) and the Survey of Income and Program Participation (SIPP), both conducted by the Bureau of the Census, which use stratified random samples of U.S. households and provide information on the demographics and economics of families.

In this analysis demographic characteristics of CPS participants were compared with those of the NPSAS sample. CPS is a survey of about 60,000 households that is currently conducted monthly in order to gather information on the demographic and economic characteristics of a representative sample of the U.S. population. Each CPS has a slightly different emphasis. Because the October survey focuses on education, the October 1985 CPS was selected for comparison with the NPSAS sample.[21]

Although there are certain similarities between the two surveys, they were conducted in entirely different ways. CPS used households as its primary unit of analysis and collected data on all residents in a given household. NPSAS, on the other hand is a representative sample of students who were enrolled in postsecondary education in the fall of 1986. Thus, in NPSAS, individual students were the unit of analysis, rather than students within a household. It is instructive, however, to compare the samples from these two surveys because both are used widely in postsecondary education research. Until NPSAS, CPS was one of the few surveys that could be used to examine the demographic characteristics of postsecondary education students.

For this analysis, comparisons were made between the NPSAS sample of students who were under age 35 and the CPS subsample of households with postsecondary students.[22] The percentage distributions of the two samples were compared for student and family characteristics including sex, age, race, marital status, and family income. Although some education-related questions were asked in the CPS, they are not directly comparable to the items asked in the NPSAS survey and are not compared in this analysis.

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[21] The comparisons made in this chapter differ from those in previous chapters in that they use weighted data rather than unweighted data.

[22] CPS data presents postsecondary data for college students 16 through 34 years old. Therefore, NPSAS students who were over 34 years old were removed from the comparison.

Given the differences in the way in which the CPS and NPSAS surveys were conducted, the distributions of demographic characteristics were remarkably similar (table 4.1). The only apparent differences were that NPSAS tended to have a slightly higher percentage of females, and the students were somewhat more likely to be married. For example, among male students, 19 percent of those in the NPSAS survey were married, compared with 14 percent from the CPS. Similarly, 22 percent of NPSAS female students were married, compared with 16 percent of CPS students. Among students under 35 years old, the age distribution of NPSAS and CPS students was virtually the same for the two surveys. Thus, this does not provide an explanation for the difference in the marital status distributions between the two samples.

Table 4.1—Percentage of students in the October 1985 CPS and NPSAS:87, by gender, age, gender by age, race, and marital status by gender

Gender		Male	Female	
CPS		49.5	50.5	
NPSAS		47.4	52.6	
Age	**Under 18**	**18–24**	**25–29**	**30–34**
CPS	1.9	69.8	17.1	11.1
NPSAS	0.7	69.9	17.7	11.7
Gender by age	**Under 18**	**18-24**	**25-29**	**30–34**
Male				
CPS	1.6	69.6	18.3	10.4
NPSAS	0.6	70.7	18.1	10.6
Female				
CPS	2.2	70.0	15.9	11.8
NPSAS	0.7	69.3	17.4	12.7
Race		**White**	**Black**	
CPS		88.7	11.3	
NPSAS		89.9	10.1	
Marital status by gender		**Single**	**Married**	
Male				
CPS		85.6	14.4	
NPSAS		81.2	18.8	
Female				
CPS		84.0	16.0	
NPSAS		77.7	22.3	

NOTE: Percentages may not add to 100 percent due to rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1985, *Current Population Reports*, Series P-20, No. 426; U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study, Updated Record and Student Questionnaire Data File.

Table 4.2 shows the distribution of family income for the two samples. For this comparison, the CPS sample is composed of households with primary family members aged 18–24 who were attending college. The NPSAS sample is limited to students who were identified as financially dependent on their parents (the only students for which family income is reported). The distribution of family income between the two samples appeared to differ markedly, especially for the lowest and highest income ranges. For example, a greater percentage of NPSAS students were from families with annual incomes of less than $10,000, while more than twice as many CPS students were from families whose annual income was $50,000 or more. One possible explanation for this difference is the fact that the CPS sample included students who were living in their family household. Thus, students who were living away from home (for example, those living in campus housing) would not be included in the sample. Furthermore, CPS students' financial dependency status was not determined. NPSAS, on the other hand, is representative of students rather than households, regardless of their living arrangements.

Table 4.2—Percentage of students in the October 1985 CPS and NPSAS:87, by family income

Family income*	Less than $10,000	$10,000-19,999	$20,000-29,999	$30,000-39,999	$40,000-49,999	$50,000 or more
CPS	7.6	13.1	15.7	18.8	14.6	30.1
NPSAS	12.7	22.0	21.6	18.6	12.3	12.8

* Income for CPS families with family members 18–24 years old attending college. Family income for NPSAS students who are financially dependent on their parents.

NOTE: Percentages may not add to 100 percent due to rounding.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1985, *Current Population Reports*, Series P-20, No. 426; U.S. Department of Education, National Center for Education Statistics, 1986–87 National Postsecondary Student Aid Study, Updated Record and Student Questionnaire Data File.

Chapter 5

Summary and Conclusions

This report examined the consistency of responses in the NPSAS:87 survey among the three groups of respondents—students, parents, and institutions. Three sets of comparisons were made: between students and institutions, between parents and institutions, and between students and parents. In addition to measuring the consistency of responses, the level of bias in reporting dollar amounts such as financial aid, education expenses, and family income was also examined. Except for the comparison between students and institutions for demographic items, comparisons involving institutions were limited to students who received financial aid.

While no one source of data was always considered the "standard" against which the other sources were compared, the institution was often presumed to be the most reliable source. This was because many of the items examined were related to financial aid, and information provided to the institution on financial aid applications must be verifiable. Furthermore, the institution record was updated to take into account changes in financial aid status that might have occurred over the year.

The results of the analysis varied according to the items being compared. As might be expected, the correlations between students and institutions for demographic items were relatively high, with a mean correlation of .88. However, the most compelling results were those showing very little agreement between students and institutions with regard to the receipt and amount of financial aid awarded. The mean correlation for items in which students were asked whether or not they received specific kinds of financial aid was only .14. The correlations between students and institutions for items concerning the actual amounts received were higher (.38); however, agreement was still relatively low. Students tended to have the strongest agreement with institutions for the amount of loan aid received (.52), and the weakest for the amount work aid received (.02).

In addition to the poor correspondence between students and institutions for financial aid items, students tended to systematically underreport the amounts of aid they received. Underestimates by the students relative to the institution records ranged from 16 percent for loan aid to 76 percent for work aid. This underreporting was observed regardless of the type of institution attended and student characteristics.

Students had moderate agreement with institutions regarding family financial items (mean correlation of .63). Among these items, the highest correlation was for independent student's income (.82), and the lowest was for parents' income (.33). The latter result is consistent with earlier studies showing students as relatively unreliable predictors of parents' income.

With respect to the comparisons involving parents, it should be remembered that the parents' survey had a relatively high nonresponse rate, both to the survey (42 percent) and for specific survey items among those who did respond. This was especially true for reporting adjusted gross income and the amount of federal income tax paid. However, among parents who did respond, their agreement with the institutions was quite high for their adjusted gross income (.83). Agreement was lowest for the amount of tuition and fees paid (.65), while agreement for

the parents' federal income taxes fell in between these two ranges (.76).[23] With respect to bias, parents consistently overestimated the amount of tuition and fees paid relative to what the institution reported.

In the final comparison, that between students and their parents, students had relatively good agreement with their parents regarding parents' highest education (.63 and .69, respectively, for mother's and father's highest education), although this agreement was not as high as one might expect for such a factual item. However, part of the question required students to know the number of years of postsecondary training for parents who had less than a bachelor's degree, a detail students would be less likely to know than the general level of their parents' education.

Students had moderate agreement with their parents with regard to the amount tuition and fees (.64) paid. However, as was true with the student–institution comparisons, there was poor correspondence between students and parents for family financial items such as parents' income (.27) and the amount of parental loans to students for education expenses (.17). Agreement between students and parents for the amount of non-loan contributions made by parents, however, was somewhat higher (.54). It is interesting to note the bias observed in student reporting relative to their parents. The amount of parental loans was consistently underreported by the students, while the amount of non-loan contributions was consistently overreported.

The results of this study indicate that NPSAS students were reliable reporters of general demographic information, but a poor source of information regarding the receipt and amount of financial aid awarded. Similarly, students had poor agreement with parents when reporting on family financial items. However, if the importance of the student survey in NPSAS is to obtain financial information on independent students who do not receive financial aid, among the few items only independent students were asked (for student income and number of dependents), agreement with the institution was relatively high. Similarly, if the importance of the parent survey is to obtain financial information on dependent students who do not receive financial aid, among the parents included in this analysis (parents of dependent students who received financial aid), the correspondence between parents and institutions was moderately high for family financial characteristics.

[23] The correlation between parents and institutions for the number of dependents in college was also .65; however, there was quite a difference in the way the question was posed to the parents and the institutions.

Appendix A

Methodology and Technical Notes

Source of Data

Estimates in all tables of this report are based on the 1986-87 National Postsecondary Student Aid Study (NPSAS). The 1986-87 survey was designed to collect financial aid and financial support information on a national sample of postsecondary students enrolled in the fall of 1986 at all academic levels and all types of institutions. Besides financial aid information, the data set also contains information on the students' socioeconomic and demographic characteristics and on their academic backgrounds, programs, and objectives. NPSAS includes three groups of postsecondary students: undergraduates, graduates, and first-professionals. Only the undergraduates were used for this analysis.

NPSAS used a three-stage sample design that involved clustering of units at the first stage and stratification of sampling units at each stage. The original sample for the 1986-87 NPSAS data collection consisted of 1,353 postsecondary institutions, clustered by geographical areas and stratified according to the highest program level (i.e., 4-year doctoral-granting, 4-year non-doctoral-granting, 2-year, or less-than-2-year) and institutional control (i.e., public, private not-for-profit, or private for-profit). The final institutional sample was reduced to 1,074 after some institutions were found to be ineligible and others refused to participate. The institutional response rate, weighted by the probability of selection and enrollment, was about 95 percent.

A stratified sample of approximately 60,000 students was then drawn from the October 1986 records of the institutions in the institutional sample. Students were stratified by level (undergraduate, graduate, or first-professional). Different sampling rates were used for each level. For each student in the sample, efforts were made to collect registration and financial aid records from the institution. All student record information collected in the fall term was updated during the spring of 1987. This information was supplemented by mail and telephone survey information collected directly from students during the spring of 1987. In total, the 1986-87 NPSAS record and student questionnaire file contains information on 43,176 students (34,544 undergraduates and 8,632 other). The overall response rate for students was 67 percent.

A Parent Questionnaire was mailed to the parents or guardians of a subsample of students chosen for participation in the 1986-87 NPSAS data collection. The purpose of this survey was to obtain detailed information on the family and economic characteristics of dependent students who did not receive financial aid. In keeping with this purpose, parents of financially independent students who were over 25 years of age were omitted from the sample. The overall response rate for this questionnaire was about 58 percent.

The majority of the analyses conducted in this report were based on unweighted data from the NPSAS survey. Only the NPSAS—CPS comparisons were based on weighted data. For a discussion of the weighting procedures used to weight the NPSAS survey, see the *Methodology Report for the National Postsecondary Student Aid Study, 1987* (Contractor Report, prepared for the National Center for Education Statistics, NCES90-309, March, 1990).

For more information on the NPSAS survey, consult the *National Postsecondary Student Aid Study Updated Record and Student Questionnaire (1987) Data File User's Manual* (Longitudinal Studies Branch, Postsecondary Education Statistics Division, Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, March 1989) and the

National Postsecondary Student Aid Study Parent Survey Supplement Data File, Data File User's Manual (Westat,Inc., Washington, D.C., a contractor report prepared for the National Center of Education Statistics, U.S. Department of Education, August, 1988).

Appendix B

Alternative Measures of Correspondence

Earlier sections of this report discussed the fact that the correlation coefficient is not necessarily a reliable indicator of the relationship between variables when marginal distributions are not normally distributed. Skewed distributions can produce significantly lower correlation coefficients than would be expected based on the actual number of corresponding responses, or matches. Table B.1 addresses this issue by presenting two alternative measures of correspondence. Presented in the table are the percentage of matches and the relative bias, in addition to the Cramer's V, for all demographic categorical variables employed in this quality of response analysis report. In addition, the mean response values are displayed. The mean difference or bias value is calculated from the difference between these two values.

Theoretically, there need not be any association between the percent of matches and the correlation coefficient given the influence of distributions of each variable. Therefore, it is quite possible for the majority of observation pairs to have similar responses (high match rate) but a very low correlation. The magnitude of the relative bias may also be independent of the size of the correlation coefficient since it is possible to have a high correlation and either a high or low relative bias. We would expect, however, to find a negative relationship between the match rate and relative bias given that a high proportion of matches should produce a smaller difference between the two means. This association may not be evident, however, when large differences between the match rate and correlation coefficient indicate a highly skewed distribution. In this case, the high match rate and highly skewed distribution would tend to inflate the magnitude of the relative bias in proportion to the difference between the match rate and correlation coefficient.

Table B.1 shows the percentage of identical student-institution responses for all categorical demographic variables in the quality of responses analysis. Demographic variables indexing student age and year of high school degree are not included since these variables are not categorical. It is important to recognize here that the variables listed, in addition to being categorical, are also only measured at the nominal level and therefore the reader should be very careful when attempting to interpret the index of relative bias presented in the table. Measures of central tendency, and statistics based upon them, cannot be meaningfully interpreted when the data do not achieve at least an ordinal or interval level of measurement. The mean value for race-ethnicity, for example, provides no useful information about the average ethnic makeup of the NPSAS sample. Corresponding bias indices based on the means are consequently meaningless as well.

Table B.1—Comparison of measures of correspondence for all categorical demographic variables.

Variable	Percent Match	Cramer's V
Gender	98.6	.97
Race—ethnicity	94.6	.75
Marital status	96.9	.81
High school degree	94.6	.81
Residence status	89.7	.84
Dependency status	95.3	.90

Given the factual nature of the demographic items such as gender or race–ethnicity it is not surprising that the match rates appear to correspond to the Cramer's V statistic quite well. For demographic items there is no obvious reason to expect a systematic reporting bias to influence the marginal distributions for these variables which could increase the disparity between the percentage of matches and Pearson r or Cramer's V statistic. It can be seen that the percentage of identical responses for each variable is consistently somewhat higher than is indicated by the associated Cramer's V statistic. Thus it appears that the measure of association employed in this analysis may slightly underestimate the correspondence between student and institution responses to the class of demographic items that are both categorical and nominal.

The difference between the match rate and Cramer's V statistic is particularly pronounced for the student race–ethnicity item. Further examination of the frequency marginals and the student-institution crosstabulation for this item shows a clear pattern of misclassification of Hispanic responses. For example, about 3 percent of students who classified themselves as Hispanic where classified as white (non Hispanic) by their institution. In this case, then, it seems as if the confusion surrounding one level of the variable class functioned to depress the Cramer's V statistic by skewing the distribution even though over 95 percent of all student-institution responses were in complete agreement.

The financial variables present a similar situation to that of the demographic variables. Table B.2 shows the alternative measures for the financial variables. The disparity between the correlation and match rate is particularly evident in the binary student-institution comparison variables—grants, work, loans, and taxes. Looking at the correlation coefficient alone belies the fact that well over half of student responses were identical to the institutional response for the given variables. Reports of work-study aid received (yes or no) show a correlation of only .14 even though over three-fourths of the students were in complete agreement with the institution response. The large disparity between the match rates and corresponding correlation coefficients for these variables may also account for the relatively large bias figures associated with these variables.

Similar patterns are found in the parent-student comparisons, although the pattern is less pronounced. Student responses to the parent contribution variable, for example, correlated only .56 with their parent's response to this same variable, even though over 80 percent of the responses were identical.

This analysis shows that there is no single measure of correspondence that fully captures the relationship between two variables. Many measures are consistent with one another, but each one may give a slightly different measure of the relationship.

Table B.2–Comparisons of measures of correspondence for financial variables

	Percent of Matches	Correlation	Relative Bias	Student Mean Value	Parent Mean Value	Inst. Mean Value
Student-Institution Comparisons						
Grants	53.6	.13	-.36	.39	—	.61
Work	78.3	.14	-.52	.09	—	.19
Loans	56.9	.17	-.30	.38	—	.55
Federal Tax	54.4	.13	-.33	.44	—	.65
Parent Income	41.9	.33	.38	3.96	—	2.87
Parent-Institution Comparisons						
AGI	6.0	.00	1.95	—	3.92	1.33
Parent-Student Comparisons						
Apply for Aid	73.0	.41	-.18	1.25	1.53	—
Parents Contribute	80.2	.56	-.32	.45	.67	—
Claim Exemption	58.2	.36	.04	5.92	5.67	—
Mother's Education	46.3	.63	-.02	5.76	5.88	—
Father's Education	48.4	.69	-.15	5.85	6.90	—

—Not applicable.

Appendix C

Statistical Tables

List of Variables in Appendix C

Student—Institutional Comparisons

Age	Age of student in years
Gender	Gender of the student
Race/ethnicity	Race of the student
Marital status	Marital status of the student
High school degree	Type of high school degree obtained by the student
Year of high school degree	Year in which high school degree was obtained
Student residence	Local residence of student while in school (on campus, off campus, with parents)
Dependency status	Dependency status of the student
Grant aid received	Receipt of grant aid (y/n)
Grant aid amount	Amount of grant aid received
Work aid received	Receipt of work aid (y/n)
Work aid amount	Amount of work aid received
Loan aid received	Receipt of loan aid (y/n)
Loan aid amount	Amount of loan aid received
Federal aid received	Receipt of federal aid (y/n)
Federal aid amount	Amount of federal aid received
Parent's income	Amount of dependent student's parents' income in 1985
Number of dependents	Number of dependents of independent students
Amount of savings	Amount of savings for independent students
Student's income	Amount of independent student's total income in 1985
Federal taxes	Amount of federal taxes paid by independent students in 1985
Tuition	Cost of tuition and fees

Parent—Institutional Comparisons

Number of dependents	Number of dependents other than student in survey
Number in college	Number of dependents in college other than the student in survey
Adjusted gross income	Amount of adjusted gross income in 1985
Tuition	Cost of tuition and fees of the student
Parent's federal tax	Amount parents paid in federal taxes in 1985

Parent—Student Comparisons

Tuition	Cost of tuition and fees of the student
Room and board	Cost room and board
Ever apply for aid	Student or parents apply for financial aid (y/n)
Parent loans to student	Amount loaned by parents to student
Parent's contribution	Parent contribute to student's educational costs (y/n)
Amt of parent's contribution	Amount of parents' contribution toward educational costs
Mother's education	Level of educational attainment by student's mother/guardian
Father's education	Level of educational attainment by student's father/guardian
Number of weeks at home	Number of weeks student was at home in 1985
Claim as exemption	Parents claim student as an exemption in 1985 (y/n)
Parent's income (categorical)	Category of parents' total income in 1985 Less than $11,000 $11,000 - 16,999 $17,000 - 22,999 $23,000 - 29,999 $30,000 - 49,999 $50,000 or more

STUDENT-INSTITUTIONAL COMPARISONS

	AGE				GENDER			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std.err.
ALL STUDENTS	41,776	0.97	0.07	0.028	43,037	0.97	(-0.00)	0.000
INSTITUTION TYPE								
Public 4-year	15,837	0.98	0.06	0.028	16,166	0.97	0.00	0.000
Public LT 4-year	4,712	0.97	0.12	0.024	4,808	0.96	(-0.00)	0.000
Private 4-year	15,579	0.97	0.05	0.164	16,291	0.98	(-0.00)	0.028
Private LT 4-year	1,809	0.97	0.06	0.067	1,834	0.96	(-0.00)	0.004
Proprietary 4-year	120	0.99	-0.12	0.058	122	0.83	0.04	0.000
Proprietary LT 4-year	3,719	0.97	0.13	0.058	3,816	0.97	0.00	0.004
ATTENDANCE STATUS								
Full-time	30,843	0.97	0.06	0.024	31,467	0.97	0.00	0.000
Part-time	10,916	0.97	0.11	0.056	11,553	0.97	(-0.00)	0.000
DEPENDENCY STATUS								
Dependent student	26,405	0.97	0.09	0.033	27,038	0.97	(-0.00)	0.000
Independent student	15,371	0.97	0.05	0.038	15,999	0.97	0.00	0.000
GENDER								
Male	19,417	0.97	0.07	0.038	-	-	-	
Female	22,359	0.98	0.07	0.032	-	-	-	
RACE/ETHNICITY								
American Indian	285	0.96	0.16	0.209	289	0.96	0.02	0.010
Asian	2,040	0.96	0.13	0.13	2,137	0.94	0.00	0.007
Black	3,700	0.97	0.16	0.074	3,784	0.96	0.00	0.004
Hispanic	2,275	0.96	-0.01	0.084	2,354	0.97	0.00	0.004
White	33,476	0.98	0.06	0.03	34,473	0.97	(-0.00)	0.000
PARENTS' INCOME								
Lt $12,000	2,086	0.97	0.08	0.053	2,103	0.98	0.00	0.003
$12,000 to 24,000	2,902	0.97	-0.02	0.056	2,922	0.98	0.00	0.000
$24,000 to 30,000	1,346	0.98	0.03	0.054	1,358	0.97	(-0.00)	0.003
$30,000 to 50,000	3,561	0.96	0.07	0.035	3,585	0.98	(-0.00)	0.000
$50,000 to 75,000	1,397	0.96	(-0.00)	0.065	1,414	0.97	0.00	0.004
$75,000 to 100,000	206	0.98	0.28	0.3	211	0.99	(-0.00)	0.010
$100,000 plus	92	1.00	-0.05	0.032	94	1.00	-	0.000
STUDENTS' INCOME								
LT$5,000	1,552	0.97	0.15	0.116	1,571	0.97	(-0.00)	0.000
$5,000 to 10,000	1,294	0.98	0	0.165	1,310	0.98	0.00	0.000
$10,000 to 15,000	802	0.98	0.15	0.102	811	0.98	(-0.00)	0.009
$15,000 to 20,000	595	0.97	0.12	0.142	600	0.98	0.00	0.000
$20,000 plus	1,056	0.97	0.13	0.103	1,070	0.97	-0.01	0.000
PARENTS' EDUCATION								
LT high school	854	0.99	0.09	0.026	867	0.96	0.00	0.006
High school only	3,314	0.98	0.01	0.046	3,362	0.97	(-0.00)	0.000
Vocational school	944	0.97	(-0.00)	0.053	958	0.99	0.00	0.004
2-year degree	1,092	0.98	0.06	0.078	1,105	0.98	(-0.00)	0.005
4-year degree	2,166	0.98	-0.03	0.061	2,202	0.97	0.00	0.004
Advanced degree	1,984	0.97	0.05	0.065	2,009	0.98	(-0.00)	0.004

STUDENT-INSTITUTIONAL COMPARISONS

(continued)

		AGE				GENDER			
		N	Consistency coefficient	Mean difference (bias)	std err.	N	Consistency coefficient	Mean difference (bias)	std err.
AGE/ACADEMIC LEVEL									
First year	LT 18	4,501	0.96	0.19	0.072	4,566	0.96	0.00	0.003
	19-23	3,836	0.95	0.12	0.097	3,899	0.97	(-0.00)	0.000
	24-29	1,337	0.96	(-0.00)	0.085	1,382	0.97	0.00	0.006
	30 plus	1,741	0.96	-0.13	0.097	1,806	0.95	-0.01	0.007
Second year	LT 18	156	0.72	1.14	0.614	157	0.97	0.00	0.025
	19-23	5,698	0.98	0.07	0.03	5,799	0.97	(-0.00)	0.000
	24-29	949	0.93	0.02	0.131	975	0.96	(-0.00)	0.008
	30 plus	1,146	0.96	-0.14	0.113	1,187	0.98	0.00	0.004
Third year	LT 18	20	0.56	3.75		21	1.00	-	
	19-23	4,304	0.96	0.16	0.073	4,369	0.98	0.00	0.000
	24-29	877	0.93	0.78	0.201	911	0.96	0.00	0.010
	30 plus	948	0.96	-0.18	0.121	1,006	0.96	(-0.00)	0.007
Fourth year	LT 18	35	0.97	0.80	0.654	35	1.00	-	0.000
	19-23	3,546	0.97	0.16	0.04	3,606	0.97	0.00	0.000
	24-29	889	0.97	0.05	0.142	907	0.98	0.01	0.003
	30 plus	783	0.97	-0.26	0.101	828	0.98	0.01	0.004
Fifth year	LT 18	8	0.80	2.38		8	1.00	-	
	19-23	695	0.97	-0.02	0.076	705	0.99	0.00	0.000
	24-29	420	0.98	-0.01	0.096	437	0.99	(-0.00)	0.005
	30 plus	267	0.97	-0.38	0.233	279	0.96	0.00	0.013
Graduate	LT 18	11	0.98	0.90		11	1.00	-	
	19-23	805	0.97	0.16	0.092	846	0.97	(-0.00)	0.004
	24-29	1,114	0.98	0.00	0.17	1,167	0.97	(-0.00)	0.007
	30 plus	927	0.98	-0.13	0.106	1,001	0.98	0.00	0.004
STUDENT QUESTIONNAIRE									
Mail		22,699	0.98	0.07	0.029	23,486	0.98	0.00	0.000
Telephone		19,077	0.97	0.07	0.043	19,551	0.97	(-0.00)	0.000

STUDENT-INSTITUTIONAL COMPARISONS

	RACE/ETHNICITY				MARITAL STATUS			
	N	Consistency coefficient	Mean difference (bias)	std. err	N	Consistency coefficient	Mean difference (bias)	std. err
ALL STUDENTS	42,793	0.75	-0.03	0	43,176	0.81	0.01	0
INSTITUTION TYPE								
Public 4-year	16,102	0.75	-0.01	0.004	16,217	0.81	0.01	0.006
Public LT 4-year	4,781	0.75	-0.02	0.003	4,828	0.90	0.01	0
Private 4-year	16,199	0.74	-0.03	0.043	16,334	0.82	0.02	0.01
Private LT 4-year	1,823	0.74	-0.02	0.01	1,838	0.76	0.03	0.004
Proprietary 4-year	119	0.80	-0.02	0.008	122	0.95	0.02	0.007
Proprietary LT 4-year	3,769	0.78	-0.10	0.011	3,837	0.72	0.04	0.013
ATTENDANCE STATUS								
Full-time	31,294	0.76	-0.06	0.005	31,561	0.75	0.01	0.004
Part-time	11,482	0.74	-0.03	0.005	11,598	0.90	0.02	0
DEPENDENCY STATUS								
Dependent student	26,894	0.75	-0.02	0.003	27,106	0.75	0.01	0.003
Independent student	15,899	0.75	-0.03	0.006	16,070	0.81	0.03	0.003
GENDER								
Male	19,895	0.74	-0.02	0.005	20,059	0.78	-0.01	0.004
Female	22,898	0.76	-0.03	0.006	23,117	0.82	-0.01	0
RACE/ETHNICITY								
American Indian	-	0.05	-	0.163	291	0.76	0.00	0.018
Asian	-	0.19	-	0.029	2,143	0.82	0.01	0.004
Black	-	0.02	-	0.012	3,804	0.80	0.03	0.008
Hispanic	-	0.38	-	0.021	2,361	0.79	0.02	0.007
White	-	0.01	-	0	34,577	0.81	0.01	0.003
PARENTS' INCOME								
Lt $12,000	2,087	0.75	-0.07	0.013	2,113	0.46	0.01	0.012
$12,000 to 24,000	2,897	0.78	-0.04	0.009	2,929	0.36	0.01	0.015
$24,000 to 30,000	1,347	0.81	-0.03	0.01	1,359	0.54	0.01	0.013
$30,000 to 50,000	3,573	0.75	-0.02	0.009	3,593	0.25	0.01	0.011
$50,000 to 75,000	1,409	0.67	-0.01	0.012	1,416	0.41	0.01	0.005
$75,000 to 100,000	211	0.87	-0.04	0.018	211	0.59	-0.01	0.019
$100,000 plus	92	0.82	-0.04	0.012	94	0.81	0.03	0.011
STUDENTS' INCOME								
LT$5,000	1,561	0.77	-0.04	0.015	1,575	0.65	0.03	0.016
$5,000 to 10,000	1,298	0.77	-0.04	0.025	1,318	0.71	0.03	0.014
$10,000 to 15,000	806	0.80	-0.02	0.038	813	0.68	0.02	0.026
$15,000 to 20,000	595	0.76	-0.04	0.024	601	0.70	0.03	0.017
$20,000 plus	1,064	0.80	-0.03	0.011	1,075	0.65	0.03	0.015
PARENTS' EDUCATION								
LT high school	857	0.77	-0.09	0.024	869	0.71	0.01	0.009
High school only	3,356	0.75	-0.01	0.01	3,374	0.80	0.01	0.005
Vocational school	956	0.75	-0.01	0.018	962	0.78	0.01	0.007
2-year degree	1,104	0.73	-0.01	0.021	1,108	0.70	0.01	0.004
4-year degree	2,197	0.76	-0.02	0.015	2,204	0.64	0.01	0.006
Advanced degree	2,000	0.70	-0.01	0.013	2,012	0.71	0.01	0.003

STUDENT-INSTITUTIONAL COMPARISONS

(continued)

		RACE/ETHNICITY				MARTIAL STATUS			
		N	Consistency coefficient	Mean difference (bias)	std.err.	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL									
First year	LT 18	4,547	0.79	-0.02	0.007	4,577	0.49	0.00	0.006
	19-23	3,872	0.76	-0.05	0.01	3,917	0.69	0.01	0.005
	24-29	1,369	0.77	-0.06	0.018	1,387	0.76	0.02	0.008
	30 plus	1,788	0.76	-0.04	0.018	1,814	0.79	0.03	0.011
Second year	LT 18	156	0.85	-0.09	0.126	158	0.40	-0.01	0.008
	19-23	5,781	0.75	-0.02	0.008	5,810	0.60	0.00	0.004
	24-29	968	0.76	-0.03	0.019	976	0.84	0.03	0.01
	30 plus	1,182	0.78	-0.04	0.012	1,193	0.88	0.02	0.008
Third year	LT 18	19	0.88	-0.11		-	-	-	
	19-23	4,351	0.75	-0.02	0.007	4,385	0.66	0.00	0.004
	24-29	907	0.77	-0.01	0.022	914	0.73	0.02	0.01
	30 plus	989	0.72	-0.03	0.016	1,012	0.81	0.03	0.012
Fourth year	LT 18	32	0.75	-0.22	0.03	35	0.80	0.03	0.041
	19-23	3,589	0.72	-0.02	0.009	3,614	0.58	0.01	0.006
	24-29	901	0.75	-0.02	0.01	909	0.84	0.03	0.009
	30 plus	819	0.71	-0.06	0.023	833	0.87	0.03	0.01
Fifth year	LT 18	8	1.00	0.00		-	-	-	
	19-23	699	0.80	-0.01	0.021	706	0.71	0.01	0.005
	24-29	435	0.77	-0.04	0.048	438	0.91	0.01	0.009
	30 plus	277	0.69	0.02	0.042	280	0.92	0.02	0.008
Graduate	LT 18	11	-0.67	-0.27		-	-	-	
	19-23	844	0.73	0.00	0.049	850	0.71	0.01	0.006
	24-29	1,162	0.74	-0.01	0.021	1,169	0.78	0.02	0.007
	30 plus	999	0.70	-0.01	0.019	1,002	0.90	0.01	0.007
STUDENT QUESTIONNAIRE									
Mail		23,397	0.76	-0.02	0.004	23,534	0.82	0.01	0.004
Telephone		19,396	0.85	-0.04	0.006	19,642	0.79	0.02	0

STUDENT-INSTITUTIONAL COMPARISONS

	HIGH SCHOOL DEGREE				YEAR OF HIGH SCHOOL DEGREE			
	N	Consistency coefficient	Mean difference (bias)	std.err.	N	Consistency coefficient	Mean difference (bias)	std.err.
ALL STUDENTS	42,117	0.81	0.04	0.000	23,325	0.96	-0.03	0.031
INSTITUTION TYPE								
Public 4-year	16,016	0.60	0.03	0.000	8,763	0.96	-0.03	0.018
Public LT 4-year	4,637	0.57	0.06	0.000	3,396	0.95	0.01	0.053
Private 4-year	16,089	0.58	0.03	0.025	7,067	0.95	-0.09	0.129
Private LT 4-year	1,801	0.59	0.04	0.007	1,495	0.98	-0.01	0.074
Proprietary 4-year	122	0.56	0.09	0.035	90	0.93	-0.12	0.041
Proprietary LT 4-year	3,452	0.58	0.08	0.010	2,514	0.94	0.08	0.045
ATTENDANCE STATUS								
Full-time	30,858	0.59	0.04	0.003	11	0.99	-0.01	0.020
Part-time	11,242	0.58	0.05	0.005	18,132	0.96	-0.12	0.066
GENDER								
Male	19,610	0.58	0.05	0.003	10,501	0.96	-0.02	0.040
Female	22,507	0.59	0.04	0.004	12,824	0.96	-0.05	0.041
RACE/ETHNICITY								
American Indian	277	0.82	0.09	0.054	163	0.95	-0.12	0.144
Asian	2,042	0.56	0.18	0.020	853	0.92	-0.01	0.207
Black	3,625	0.57	0.05	0.007	2,189	0.94	0.02	0.121
Hispanic	2,192	0.59	0.09	0.015	1,249	0.98	-0.01	0.056
White	33,981	0.58	0.02	0.000	18,871	0.96	-0.04	0.032
DEPENDENCY STATUS								
Dependent student	26,662	0.82	0.03	0.000	16,499	0.92	0.03	0.024
Independent student	15,455	0.59	0.05	0.005	6,826	0.93	-0.17	0.072
PARENTS' INCOME								
Lt $12,000	2,031	0.60	0.04	0.011	1,456	0.92	0.01	0.033
$12,000 to 24,000	2,882	0.52	0.03	0.005	2,045	0.92	0.02	0.023
$24,000 to 30,000	1,341	0.51	0.02	0.007	919	0.92	0.01	0.023
$30,000 to 50,000	3,566	0.47	0.02	0.004	2,368	0.94	0.01	0.011
$50,000 to 75,000	1,410	1.00	0.01	0.006	828	0.90	0.01	0.019
$75,000 to 100,000	209	1.00	0.02	0.020	100	0.99	0.01	0.023
$100,000 plus	91	1.00	-	0.000	40	0.96	-0.10	0.120
STUDENTS' INCOME								
LT$5,000	1,500	0.59	0.04	0.011	795	0.94	0.03	0.106
$5,000 to 10,000	1,281	0.59	0.05	0.012	673	0.89	0.13	0.158
$10,000 to 15,000	774	0.58	0.06	0.025	406	0.89	-0.31	0.356
$15,000 to 20,000	579	0.56	0.04	0.018	269	0.95	0.05	0.109
$20,000 plus	1,052	0.82	0.05	0.014	487	0.94	-0.14	0.115
PARENTS' EDUCATION								
LT high school	830	0.56	0.07	0.011	586	0.90	0.06	0.069
High school only	3,325	0.86	0.03	0.005	2,251	0.91	-0.03	0.017
Vocational school	946	0.48	0.02	0.004	617	0.93	0.04	0.054
2-year degree	1,090	0.76	0.02	0.006	677	0.62	0.05	0.177
4-year degree	2,190	0.61	0.02	0.020	1,286	0.94	0.00	0.026
Advanced degree	1,995	0.73	0.02	0.000	1,029	0.92	-0.04	0.031

STUDENT-INSTITUTIONAL COMPARISONS

(continued)

		HIGH SCHOOL DEGREE				YEAR OF HIGH SCHOOL DEGREE			
		N	Consistency coefficient	Mean difference (bias)	std.err.	N	Consistency coefficient	Mean difference (bias)	std.err.
AGE/ACADEMIC LEVEL									
First year	LT 18	4,518	0.52	0.03	0.005	3,432	0.18	0.08	0.076
	19-23	3,787	0.57	0.05	0.009	2,782	0.60	0.08	0.089
	24-29	1,294	0.56	0.07	0.016	822	0.80	-0.02	0.086
	30 plus	1,665	0.59	0.06	0.011	1,020	0.87	-0.03	0.154
Second year	LT 18	147	0.75	0.08	0.028	90	0.89	0.03	0.029
	19-23	5,745	0.48	0.03	0.006	4,108	0.77	0.04	0.013
	24-29	955	0.59	0.05	0.015	586	0.82	-0.15	0.075
	30 plus	1,157	0.60	0.05	0.012	713	0.89	-0.19	0.129
Third year	LT 18	19	-	0.05		10	1.00	0.03	
	19-23	4,327	0.56	0.02	0.006	2,682	0.60	-0.05	0.024
	24-29	892	0.63	0.03	0.012	469	0.74	-0.39	0.114
	30 plus	979	0.56	0.05	0.016	492	0.88	0.30	0.274
Fourth year	LT 18	33	-	0.21	0.114	23	0.87	0.30	
	19-23	3,589	0.50	0.02	0.004	2,081	0.61	0.01	0.015
	24-29	890	0.58	0.04	0.015	470	0.82	-0.18	0.082
	30 plus	819	0.86	0.05	0.015	397	0.92	-0.42	0.098
Fifth year	LT 18	7	-	-	-	6	0.99	-0.17	
	19-23	701	0.75	0.02	0.008	410	0.40	0.05	0.061
	24-29	430	0.91	0.03	0.009	233	0.31	0.33	0.287
	30 plus	266	0.91	0.06	0.028	111	0.98	-0.11	0.184
Graduate	LT 18	10	-	-	-	6	0.94	0.17	
	19-23	840	0.93	0.05	0.015	208	0.63	0.04	0.076
	24-29	1,154	0.66	0.06	0.012	254	0.49	-0.09	0.433
	30 plus	974	0.63	0.04	0.015	224	0.84	-0.61	0.393
STUDENT QUESTIONNAIRE									
Mail		22,852	0.60	0.06	0.004	12,041	0.95	-0.03	0.052
Telephone		19,265	0.56	0.01	0.003	11,284	0.96	-0.03	0.029

STUDENT-INSTITUTIONAL COMPARISONS

	STUDENT RESIDENCE				DEPENDENCY STATUS			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	43,130	0.84	0.01	0.006	43,176	0.90	-0.02	0.000
INSTITUTION TYPE								
Public 4-year	16,211	0.82	0.04	0.006	16,217	0.91	-0.01	0.000
Public LT 4-year	4,814	0.83	-0.02	0.017	4,828	0.92	0.00	0.000
Private 4-year	16,319	0.84	0.01	0.028	16,334	0.90	-0.01	0.026
Private LT 4-year	1,834	0.81	0.03	0.009	1,838	0.89	-0.03	0.004
Proprietary 4-year	122	0.62	0.02	0.016	122	0.93	0.00	0.012
Proprietary LT 4-year	3,830	0.77	-0.04	0.009	3,837	0.81	-0.08	0.010
ATTENDANCE STATUS								
Full-time	31,528	0.83	0.02	0.007	31,561	0.86	-0.02	0.000
Part-time	11,585	0.79	0.01	0.006	11,598	0.91	0.01	0.000
DEPENDENCY STATUS								
Dependent student	27,085	0.82	0.01	0.007	-	-	-	
Independent student	16,045	0.63	0.02	0.005	-	-	-	
GENDER								
Male	20,039	0.83	0.01	0.008	20,059	0.90	0.00	0.000
Female	23,091	0.85	0.01	0.005	23,117	0.90	-0.01	0.000
RACE/ETHNICITY								
American Indian	288	0.78	0.01	0.022	291	0.83	-0.04	0.021
Asian	2,140	0.77	0.00	0.010	2,143	0.86	0.00	0.007
Black	3,797	0.82	-0.01	0.014	3,804	0.84	-0.04	0.006
Hispanic	2,357	0.84	-0.01	0.010	2,361	0.87	-0.01	0.007
White	34,548	0.84	0.02	0.006	34,577	0.91	-0.01	0.000
PARENTS' INCOME								
Lt $12,000	2,110	0.77	-0.01	0.013	2,113	-	0.04	0.007
$12,000 to 24,000	2,928	0.78	0.02	0.012	2,929	-	0.01	0.003
$24,000 to 30,000	1,359	0.81	0.05	0.015	1,359	-	0.01	0.004
$30,000 to 50,000	3,590	0.80	0.04	0.013	3,593	-	0.01	0.000
$50,000 to 75,000	1,413	0.83	0.02	0.015	1,416	-	0.01	0.005
$75,000 to 100,000	211	0.77	0.04	0.046	211	-	0.02	0.008
$100,000 plus	94	0.87	0.03	0.038	94	-	0.03	0.015
STUDENTS' INCOME								
LT$5,000	1,574	0.63	-0.01	0.016	1,575	-	-0.19	0.014
$5,000 to 10,000	1,315	0.67	0.01	0.012	1,318	-	-0.18	0.012
$10,000 to 15,000	813	0.71	0.02	0.008	813	-	-0.15	0.016
$15,000 to 20,000	601	0.62	0.02	0.014	601	-	-0.12	0.015
$20,000 plus	1,074	0.57	0.02	0.008	1,075	-	-0.08	0.011
PARENTS' EDUCATION								
LT high school	869	0.79	0.00	0.016	869	0.76	-0.06	0.013
High school only	3,367	0.83	0.01	0.011	3,374	0.83	-0.04	0.004
Vocational school	962	0.81	-0.01	0.022	962	0.81	-0.05	0.007
2-year degree	1,108	0.82	0.03	0.018	1,108	0.82	-0.04	0.007
4-year degree	2,202	0.82	0.03	0.011	2,204	0.84	-0.02	0.005
Advanced degree	2,012	0.80	0.05	0.019	2,012	0.83	-0.03	0.004

STUDENT-INSTITUTIONAL COMPARISONS

(continued)

		STUDENT RESIDENCE				DEPENDENCY STATUS			
		N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL									
First year	LT 18	4,575	0.76	0.01	0.009	4,577	0.47	-0.01	0.000
	19-23	3,912	0.82	-0.01	0.011	3,917	0.78	-0.04	0.005
	24-29	1,385	0.77	-0.02	0.015	1,387	0.79	0.06	0.009
	30 plus	1,812	0.63	(-0.00)	0.011	1,814	0.64	-0.01	0.010
Second year	LT 18	158	0.73	0.04	0.032	158	-0.02	-0.01	0.012
	19-23	5,807	0.81	0.03	0.009	5,810	0.80	-0.09	0.000
	24-29	975	0.77	0.02	0.014	976	0.88	-0.03	0.008
	30 plus	1,188	0.70	0.00	0.008	1,193	0.80	0.00	0.006
Third year	LT 18	21	0.77	0.05		21	-	-0.05	
	19-23	4,382	0.82	0.03	0.008	4,385	0.81	-0.02	0.004
	24-29	914	0.81	0.01	0.009	914	0.86	-0.03	0.007
	30 plus	1,012	0.65	0.02	0.008	1,012	0.75	0.01	0.007
Fourth year	LT 18	35	0.79	-0.11	0.039	35	1.00	-	0.000
	19-23	3,614	0.79	0.02	0.008	3,614	0.81	-0.01	0.004
	24-29	909	0.72	0.01	0.009	909	0.84	-0.02	0.007
	30 plus	833	0.62	0.02	0.011	833	0.78	0.02	0.009
Fifth year	LT 18	8	1.00	-	-	8	-	-	
	19-23	705	0.76	-0.01	0.014	706	0.81	-0.02	0.011
	24-29	438	0.76	0.00	0.016	438	0.87	-0.03	0.012
	30 plus	280	0.66	0.03	0.010	280	0.77	0.00	0.014
Graduate	LT 18	11	0.62	-0.18		11	-	0.09	
	19-23	849	0.71	0.06	0.057	850	0.68	-0.04	0.011
	24-29	1,169	0.73	0.01	0.017	1,169	0.85	-0.02	0.009
	30 plus	1,000	0.71	0.02	0.010	1,002	0.83	0.01	0.005
STUDENT QUESTIONNAIRE									
Mail		23,505	0.84	0.02	0.006	23,534	0.90	-0.01	0.000
Telephone		19,625	0.84	0.01	0.007	19,642	0.90	-0.02	0.000

STUDENT-INSTITUTIONAL COMPARISONS

	GRANT AID RECEIVED				GRANT AID AMOUNT			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	26,312	0.13	-0.22	0.007	9,465	0.24	-597.83	28.712
INSTITUTION TYPE								
Public 4-year	8,588	0.06	-0.24	0.009	2,235	0.05	-604.57	53.252
Public LT 4-year	1,855	0.15	-0.26	0.015	512	0.11	-198.36	79.791
Private 4-year	11,109	0.15	-0.20	0.012	4,326	0.18	-738.54	66.503
Private LT 4-year	1,360	0.12	-0.25	0.031	675	0.17	-278.82	114.716
Proprietary 4-year	95	-0.02	-0.24	0.059	29	0.07	-925.93	
Proprietary LT 4-year	3,305	0.10	-0.16	0.014	1,688	0.06	-471.41	52.814
ATTENDANCE STATUS								
Full-time	21,858	0.11	-0.25	0.008	8,639	0.23	-654.20	30.248
Part-time	4,447	0.11	-0.07	0.017	824	0.29	-3.56	113.699
DEPENDENCY STATUS								
Dependent student	16,225	0.10	-0.23	0.009	6,225	0.24	-549.09	38.221
Independent student	10,087	0.15	-0.19	0.012	3,240	0.23	-691.48	51.411
GENDER								
Male	12,186	0.12	-0.20	0.011	4,017	0.25	-656.41	55.366
Female	14,126	0.13	-0.23	0.007	5,448	0.23	-554.64	43.838
RACE/ETHNICITY								
American Indian	188	0.15	-0.38	0.098	79	0.09	-1,875.47	292.894
Asian	1,252	0.06	-0.24	0.027	360	0.25	-834.78	253.205
Black	2,965	0.12	-0.32	0.019	1,384	0.25	-921.46	69.023
Hispanic	1,580	0.09	-0.29	0.024	654	0.30	-1,155.66	218.168
White	20,327	0.13	-0.19	0.009	6,988	0.24	-454.88	33.127
PARENTS' INCOME								
Lt $12,000	2,091	0.05	-0.49	0.018	1,206	0.28	-1,338.44	81.595
$12,000 to 24,000	2,877	0.07	-0.43	0.014	1,491	0.31	-812.69	97.252
$24,000 to 30,000	1,328	0.04	-0.33	0.020	609	0.27	-686.47	145.699
$30,000 to 50,000	3,417	0.11	-0.21	0.020	1,267	0.28	-54.85	105.669
$50,000 to 75,000	1,281	0.11	-0.13	0.029	442	0.15	500.73	158.308
$75,000 to 100,000	186	0.22	-0.11	0.064	60	0.16	1,037.50	631.821
$100,000 plus	78	0.13	-0.04	0.096	17	0.41	1,818.88	
STUDENTS' INCOME								
LT$5,000	1,553	0.13	-0.43	0.022	749	0.27	-890.78	78.230
$5,000 to 10,000	1,297	0.15	-0.36	0.019	588	0.12	-389.96	152.184
$10,000 to 15,000	791	0.09	-0.28	0.036	329	0.24	-446.57	132.410
$15,000 to 20,000	586	0.12	-0.21	0.046	169	0.32	-309.78	152.902
$20,000 plus	1,013	0.11	-0.03	0.033	243	0.18	-296.63	160.276
PARENTS' EDUCATION								
LT high school	626	0.10	-0.25	0.028	302	0.31	-973.64	135.808
High school only	1,889	0.13	-0.21	0.019	674	0.23	-586.04	96.425
Vocational school	538	0.18	-0.18	0.038	210	0.21	-967.27	175.007
2-year degree	540	0.07	-0.21	0.036	198	0.22	-488.78	193.741
4-year degree	912	0.13	-0.10	0.026	254	0.16	-241.33	211.649
Advanced degree	859	0.13	-0.04	0.036	240	0.15	-802.79	293.361

STUDENT-INSTITUTIONAL COMPARISONS

(continued)

		GRANT AID RECEIVED				GRANT AID AMOUNT			
		N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std.err.
AGE/ACADEMIC LEVEL									
First year	LT 18	3,106	0.05	-0.29	0.019	1,397	0.31	-453.99	72.047
	19-23	2,623	0.11	-0.24	0.020	1,181	0.27	-557.60	68.208
	24-29	963	0.22	-0.20	0.023	436	0.15	-408.86	158.662
	30 plus	1,114	0.14	-0.23	0.033	451	0.08	-565.00	137.050
Second year	LT 18	108	0.10	-0.31	0.095	40	0.10	-146.10	566.405
	19-23	3,560	0.08	-0.29	0.015	1,508	0.25	-450.95	78.897
	24-29	579	0.12	-0.25	0.040	189	0.04	-703.49	160.961
	30 plus	652	0.16	-0.19	0.025	199	0.26	-474.72	177.542
Third year	LT 18	15	-0.08	-0.53		3	0.97	-292.00	
	19-23	2,712	0.05	-0.30	0.016	1,058	0.19	-668.91	98.057
	24-29	538	0.05	-0.27	0.030	171	0.10	-877.35	147.680
	30 plus	499	0.07	-0.22	0.037	146	0.16	-717.57	214.970
Fourth year	LT 18	25	0.39	-0.44		8	0.48	237.50	
	19-23	2,236	0.09	-0.26	0.017	935	0.25	-444.98	106.984
	24-29	493	0.03	-0.26	0.032	142	0.30	-599.44	215.717
	30 plus	408	0.11	-0.20	0.043	429	0.08	-733.52	200.751
Fifth year	LT 18	6	-0.32	0.17		4	0.74	-1,445.00	
	19-23	373	0.06	-0.27	0.050	133	0.12	-764.96	270.282
	24-29	200	0.12	-0.12	0.055	54	0.07	-249.70	299.891
	30 plus	117	0.08	-0.14	0.070	28	0.54	-322.25	
Graduate	LT 18	9	-0.16	-0.11		5	-0.68	793.80	
	19-23	611	0.11	-0.07	0.032	151	0.12	-2,258.31	471.957
	24-29	681	0.12	-0.02	0.031	116	0.09	-1,020.93	673.818
	30 plus	468	0.00	0.00	0.037	57	0.37	-54.88	589.636
STUDENT QUESTIONNAIRE									
Mail		14,241	0.12	-0.22	0.006	4,997	0.23	-657.91	43.484
Telephone		12,071	0.13	-0.21	0.011	4,468	0.25	-530.64	430.440

STUDENT-INSTITUTIONAL COMPARISONS

	WORK AID RECEIVED				WORK AID AMOUNT			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	26,312	0.14	-0.10	0.005	2,921	0.02	-1,407.98	156.270
INSTITUTION TYPE								
Public 4-year	8,588	0.05	-0.12	0.008	772	0.02	-1,701.20	155.294
Public LT 4-year	1,855	0.13	-0.07	0.008	78	0.31	-1,257.58	406.957
Private 4-year	11,109	0.14	-0.11	0.005	1,879	0.03	-1,229.24	110.712
Private LT 4-year	1,360	0.13	-0.05	0.010	111	0.43	-646.21	125.246
Proprietary 4-year	95	-	0.02	0.021	-	-	-	
Proprietary LT 4-year	3,305	0.15	-0.02	0.025	81	-0.08	-3,948.46	985.046
ATTENDANCE STATUS								
Full-time	21,858	0.14	-0.11	0.005	2,797	0.02	-1,356.11	153.726
Part-time	4,447	0.01	-0.01	0.009	124	0.02	-2,577.87	412.281
DEPENDENCY STATUS								
Dependent student	16,225	0.15	-0.11	0.006	2,220	0.04	-1,111.03	86.178
Independent student	10,087	0.08	-0.06	0.006	701	0.02	-2,348.41	352.399
GENDER								
Male	12,186	0.13	-0.10	0.007	1348	0.03	-1,611.86	284.838
Female	14,126	0.15	-0.10	0.005	1573	0.00	-1,233.26	82.686
RACE/ETHNICITY								
American Indian	188	0.03	-0.11	0.034	11	-0.03	-1,230.82	
Asian	1,252	0.11	-0.15	0.016	141	-0.04	-2,059.54	367.571
Black	2,965	0.18	-0.11	0.013	328	-0.02	-1,069.06	231.638
Hispanic	1,580	0.10	-0.09	0.013	150	-0.10	-1,624.16	465.939
White	20,327	0.14	-0.09	0.006	2291	0.03	-1,403.10	153.546
PARENTS' INCOME								
Lt $12,000	2,091	0.20	-0.18	0.017	369	0.02	-953.10	69.394
$12,000 to 24,000	2,877	0.19	-0.22	0.016	588	0.02	-966.60	115.218
$24,000 to 30,000	1,328	0.17	-0.25	0.017	288	0.12	-963.70	96.458
$30,000 to 50,000	3,417	0.14	-0.16	0.012	566	0.04	-1,003.81	122.679
$50,000 to 75,000	1,281	0.20	-0.08	0.014	172	0.06	-828.24	164.321
$75,000 to 100,000	186	0.02	-0.03	0.043	21	-0.16	-1,249.19	
$100,000 plus	78	0.18	-0.04	0.055	7	-0.20	-887.71	
STUDENTS' INCOME								
LT$5,000	1,553	0.07	-0.17	0.022	218	0.04	-1,796.69	154.614
$5,000 to 10,000	1,297	0.13	-0.10	0.014	141	0.06	-1,618.92	228.328
$10,000 to 15,000	791	0.09	-0.08	0.019	69	0.18	-3,083.46	814.934
$15,000 to 20,000	586	0.08	-0.07	0.026	37	-0.20	-3,191.70	1329.549
$20,000 plus	1,013	0.03	-0.02	0.027	51	-0.04	-4,306.37	1966.849
PARENTS' EDUCATION								
LT high school	626	0.13	-0.08	0.018	65	0.03	-965.15	95.681
High school only	1,889	0.12	-0.08	0.011	170	0.10	-1,474.58	177.904
Vocational school	538	0.24	-0.11	0.017	67	-0.15	-1,521.73	991.608
2-year degree	540	0.04	-0.05	0.023	49	-0.05	-1,639.80	354.047
4-year degree	912	0.10	-0.04	0.015	80	-0.07	-1,019.29	207.881
Advanced degree	859	0.08	-0.01	0.017	66	0.05	-1,324.11	268.170

STUDENT-INSTITUTIONAL COMPARISONS

(continued)

		WORK AID RECEIVED				WORK AID AMOUNT			
		N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL									
First year	LT 18	3,106	0.16	-0.13	0.011	481	0.08	-730.23	54.546
	19-23	2,623	0.20	-0.09	0.013	234	-0.08	-1,165.52	302.817
	24-29	963	0.15	-0.02	0.016	34	-0.08	-2,939.24	1451.767
	30 plus	1,114	0.08	0.00	0.013	22	-0.30	-2,531.36	
Second year	LT 18	108	-0.02	-0.19	0.056	15	0.31	-1,158.80	
	19-23	3,560	0.13	-0.15	0.013	562	0.07	-965.00	77.434
	24-29	579	0.14	-0.06	0.024	37	-0.12	-2,028.46	1251.678
	30 plus	452	0.04	-0.03	0.015	21	-0.01	-1,371.43	
Third year	LT 18	15	0.68	-0.07		1	-	300.00	
	19-23	2,712	0.14	-0.14	0.012	414	0.05	-1,066.04	106.575
	24-29	538	0.13	-0.07	0.018	44	0.02	-1,042.23	145.379
	30 plus	499	0.09	-0.01	0.021	23	0.17	-1,738.65	
Fourth year	LT 18	25	-0.06	-0.04		1	-	-730.00	
	19-23	2,236	0.13	-0.16	0.011	423	0.08	-933.45	96.268
	24-29	493	0.12	-0.07	0.021	48	0.02	-2,187.56	650.612
	30 plus	408	-0.03	(-0.00)	0.030	26	-0.14	-2,095.12	
Fifth year	LT 18	6	-	0.00	-	0	-	-	
	19-23	373	0.06	-0.14	0.035	50	0.58	-1,352.76	21.172
	24-29	200	0.16	-0.06	0.032	24	-0.30	-1,567.75	
	30 plus	117	0.06	-0.02	0.036	5	-0.53	-865.20	
Graduate	LT 18	9	-0.13	0.00		0	-	-	
	19-23	611	0.03	-0.08	0.029	54	0.13	-2,789.04	438.114
	24-29	681	0.05	-0.07	0.023	56	-0.14	-2,765.57	553.913
	30 plus	468	0.00	-0.04	0.022	17	-0.19	-2,054.47	
STUDENT QUESTIONNAIRE									
Mail		14,241	0.13	-0.10	0.006	1,563	0.00	-1,502.79	141.372
Telephone		12,071	0.14	-0.09	0.006	1,358	0.03	-1,298.86	273.945

STUDENT-INSTITUTIONAL COMPARISONS

	LOAN AID RECEIVED				LOAN AID AMOUNT			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	26,312	0.17	-0.17	0.006	8,972	0.52	-633.48	64.531
INSTITUTION TYPE								
Public 4-year	8,588	0.11	-0.20	0.010	2,153	0.52	-675.98	43.743
Public LT 4-year	1,855	0.27	-0.08	0.008	229	0.23	-706.74	174.435
Private 4-year	11,109	0.11	-0.16	0.050	4,053	0.52	-899.76	133.235
Private LT 4-year	1,360	0.12	-0.16	0.015	501	0.19	-490.14	148.828
Proprietary 4-year	95	0.06	-0.28	0.028	49	-0.01	-135.41	149.539
Proprietary LT 4-year	3,305	0.12	-0.16	0.016	1,987	0.09	-84.24	65.133
ATTENDANCE STATUS								
Full-time	21,858	0.15	-0.20	0.007	8,266	0.52	-649.62	70.984
Part-time	4,447	0.17	-0.01	0.010	705	0.41	-448.37	91.645
DEPENDENCY STATUS								
Dependent student	16,225	0.14	-0.17	0.007	5,610	0.49	-501.28	101.712
Independent student	10,087	0.21	-0.16	0.009	3,362	0.55	-854.07	58.919
GENDER								
Male	12,186	0.18	-0.17	0.007	4,142	0.53	-660.61	106.397
Female	14,126	0.16	-0.17	0.007	4,830	0.49	-610.21	55.062
RACE/ETHNICITY								
American Indian	188	0.22	-0.19	0.072	65	0.65	-588.77	440.133
Asian	1,252	0.19	-0.09	0.021	287	0.62	-137.51	226.050
Black	2,965	0.17	-0.20	0.016	1,123	0.52	-501.93	95.760
Hispanic	1,580	0.25	-0.16	0.016	582	0.43	-505.52	186.219
White	20,327	0.16	-0.17	0.007	6,915	0.52	-686.61	57.528
PARENTS' INCOME								
Lt $12,000	2,091	0.19	-0.25	0.019	891	0.45	-306.30	103.644
$12,000 to 24,000	2,877	0.12	-0.32	0.016	1,283	0.46	-549.54	141.650
$24,000 to 30,000	1,328	0.10	-0.39	0.023	646	0.52	-668.28	101.580
$30,000 to 50,000	3,417	0.07	-0.41	0.012	1,669	0.50	-625.92	60.501
$50,000 to 75,000	1,281	0.07	-0.31	0.021	627	0.48	-194.71	187.991
$75,000 to 100,000	186	0.05	-0.22	0.051	72	0.45	-1,228.56	511.759
$100,000 plus	78	0.20	-0.04	0.072	30	0.27	658.50	808.108
STUDENTS' INCOME								
LT$5,000	1,553	0.19	-0.33	0.023	736	0.53	-1,177.65	115.660
$5,000 to 10,000	1,297	0.12	-0.36	0.028	605	0.62	-902.51	109.041
$10,000 to 15,000	791	0.15	-0.34	0.023	384	0.53	-755.41	129.337
$15,000 to 20,000	586	0.09	-0.46	0.033	257	0.67	-1,273.69	206.893
$20,000 plus	1,013	0.12	-0.37	0.023	556	0.46	-788.36	156.805
PARENTS' EDUCATION								
LT high school	626	0.24	-0.15	0.027	241	0.43	-375.44	145.225
High school only	1,889	0.16	-0.15	0.017	595	0.55	-629.39	143.455
Vocational school	538	0.11	-0.12	0.030	172	0.38	-118.08	175.303
2-year degree	540	0.19	-0.12	0.027	179	0.39	-222.81	255.260
4-year degree	912	0.15	-0.05	0.023	230	0.47	-239.71	256.477
Advanced degree	859	0.15	0.00	0.030	223	0.39	-283.02	534.639

STUDENT-INSTITUTIONAL COMPARISONS

(continued)

		LOAN AID RECEIVED				LOAN AID AMOUNT			
		N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL									
First year	LT 18	3,106	0.12	-0.19	0.016	1,118	0.12	-581.24	60.835
	19-23	2,623	0.24	-0.18	0.016	1,123	0.26	-245.07	84.390
	24-29	963	0.35	-0.15	0.026	444	0.31	-208.74	160.386
	30 plus	1,114	0.36	-0.09	0.025	392	0.38	-257.32	126.759
Second year	LT 18	108	0.10	-0.31	0.089	34	-0.15	-1,121.53	398.881
	19-23	3,560	0.14	-0.21	0.015	1,255	0.29	-654.53	74.072
	24-29	579	0.14	-0.20	0.033	176	0.42	-648.66	170.362
	30 plus	652	0.16	-0.12	0.027	158	0.64	-484.85	204.911
Third year	LT 18	15	0.21	-0.07		2	-	2,815.00	
	19-23	2,712	0.06	-0.24	0.017	893	0.17	-542.75	83.282
	24-29	538	0.06	-0.19	0.037	133	0.63	-684.21	281.719
	30 plus	499	0.04	-0.06	0.034	104	0.62	-1,023.55	208.769
Fourth year	LT 18	25	0.00	-0.04		5	0.57	-1,840.00	
	19-23	2,236	0.06	-0.21	0.018	768	0.11	-637.75	93.253
	24-29	493	0.06	-0.24	0.036	148	0.76	-175.84	238.512
	30 plus	408	0.06	-0.08	0.031	95	0.38	-1,456.89	222.136
Fifth year	LT 18	6	0.32	0.50		1	-	0.00	
	19-23	373	0.06	-0.25	0.045	129	0.58	-627.65	167.853
	24-29	200	0.14	-0.20	0.047	68	0.50	-444.31	363.684
	30 plus	117	0.10	-0.15	0.057	24	0.84	-447.08	
Graduate	LT 18	9	-0.32	0.33		4	0.15	412.50	
	19-23	611	0.21	-0.16	0.031	239	0.36	-838.07	625.032
	24-29	681	0.11	-0.17	0.028	197	0.52	-1,316.48	610.432
	30 plus	468	0.11	-0.05	0.036	100	0.47	-1,998.70	402.490
STUDENT QUESTIONNAIRE									
Mail		14,241	0.17	-0.17	0.008	4,640	0.53	-671.48	89.982
Telephone		12,071	0.17	-0.18	0.008	4,332	0.51	-592.77	56.789

	FEDERAL AID RECEIVED				FEDERAL AID AMOUNT			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	26,312	0.13	-0.22	0.006	10,504	0.25	-1,355.32	54.699
INSTITUTION TYPE								
Public 4-year	8,588	0.09	-0.27	0.011	2,655	0.3	1,321.98	49.851
Public LT 4-year	1,855	0.16	-0.22	0.008	486	0.25	-514.42	133.197
Private 4-year	11,109	0.11	-0.17	0.044	4,381	0.26	-2,084.72	381.130
Private LT 4-year	1,360	0.11	-0.23	0.015	652	0.06	-694.43	121.143
Proprietary 4-year	95	0.17	-0.29	0.030	51	-0.12	-410.63	115.089
Proprietary LT 4-year	3,305	0.05	-0.22	0.012	2,279	0.05	-381.57	90.767
ATTENDANCE STATUS								
Full-time	21,858	0.10	-0.25	0.008	9,617	0.25	-1,422.92	58.204
Part-time	4,447	0.14	-0.04	0.013	886	0.24	-626.51	110.702
DEPENDENCY STATUS								
Dependent student	16,225	0.11	-0.21	0.008	6,448	0.23	-1,125.76	44.775
Independent student	10,087	0.18	-0.23	0.011	4,056	0.29	-1,720.27	111.612
GENDER								
Male	12,186	0.13	-0.21	0.011	4,677	0.27	-1,565.91	72.283
Female	14,126	0.13	-0.22	0.008	5,827	0.21	-1,186.30	58.009
RACE/ETHNICITY								
American Indian	188	0.18	-0.40	0.089	88	0.28	-980.72	401.540
Asian	1,252	0.11	-0.17	0.025	354	0.27	-1,511.54	205.729
Black	2,965	0.10	-0.31	0.020	1,477	0.17	-1,212.34	94.159
Hispanic	1,580	0.13	-0.28	0.018	732	0.25	-1,366.42	128.792
White	20,327	0.13	-0.20	0.007	7,853	0.27	-1,378.34	61.970
PARENTS' INCOME								
Lt $12,000	2,091	0.02	-0.48	0.018	1,244	0.25	-1,464.36	95.059
$12,000 to 24,000	2,877	0.06	-0.46	0.016	1,621	0.18	-1,231.01	113.000
$24,000 to 30,000	1,328	0.06	-0.40	0.020	704	0.24	-1,175.72	105.572
$30,000 to 50,000	3,417	0.05	-0.38	0.013	1,714	0.19	-791.50	79.856
$50,000 to 75,000	1,281	0.03	-0.29	0.021	625	0.24	-830.27	171.790
$75,000 to 100,000	186	-0.01	-0.18	0.052	71	0.36	-1,494.62	614.081
$100,000 plus	78	0.12	-0.17	0.077	31	0.39	-1,600.94	623.740
STUDENTS' INCOME								
LT$5,000	1,553	0.08	-0.49	0.024	908	0.24	-2,418.32	159.825
$5,000 to 10,000	1,297	0.03	-0.46	0.023	731	0.33	-1,678.46	163.036
$10,000 to 15,000	791	0.05	-0.44	0.027	456	0.33	-1,120.47	155.872
$15,000 to 20,000	586	0.14	-0.49	0.032	290	0.34	-1,603.55	311.329
$20,000 plus	1,013	0.06	-0.36	0.030	563	0.33	-1,575.42	197.059
PARENTS' EDUCATION								
LT high school	626	0.16	-0.26	0.030	334	0.21	-1,009.34	129.920
High school only	1,889	0.11	-0.21	0.018	739	0.22	-1,140.71	167.426
Vocational school	538	0.09	-0.15	0.040	213	0.15	-850.57	204.789
2-year degree	540	0.12	-0.16	0.036	200	0.18	-1,584.70	215.714
4-year degree	912	0.08	-0.07	0.027	248	0.28	-1,567.00	210.741
Advanced degree	859	0.10	0.02	0.036	237	0.19	-1,768.55	281.161

STUDENT-INSTITUTIONAL COMPARISONS

(continued)

		FEDERAL AID RECEIVED				FEDERAL AID AMOUNT			
		N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL									
First year	LT 18	3,106	0.08	-0.23	0.016	1,290	0.07	-898.55	82.194
	19-23	2,623	0.17	-0.25	0.018	1,341	0.12	-567.37	103.687
	24-29	963	0.21	-0.23	0.028	543	0.16	-651.93	169.085
	30 plus	1,114	0.21	-0.22	0.032	531	0.24	-652.83	120.364
Second year	LT 18	108	0.06	-0.34	0.100	41	-0.15	-1,666.80	514.039
	19-23	3,560	0.10	-0.28	0.015	1,521	0.19	-1,017.28	89.509
	24-29	579	0.11	-0.28	0.047	226	0.20	-886.99	219.165
	30 plus	652	0.15	-0.22	0.030	215	0.27	-927.61	261.115
Third year	LT 18	15	-0.20	-0.33		1	-	2,330.00	
	19-23	2,712	0.02	-0.28	0.018	1,035	0.16	-1,074.46	88.571
	24-29	538	0.18	-0.27	0.040	174	0.42	-1,596.34	255.622
	30 plus	499	0.03	-0.14	0.043	142	0.10	-1,076.99	282.587
Fourth year	LT 18	25	0.05	-0.40		7	0.83	492.43	
	19-23	2,236	0.06	-0.24	0.015	879	0.03	-1,133.87	120.867
	24-29	493	0.04	-0.32	0.036	182	0.46	-1,584.87	217.809
	30 plus	408	0.16	-0.15	0.031	129	0.28	-1,450.78	330.308
Fifth year	LT 18	6	0.45	0.33		3	1.00	456.67	
	19-23	373	0.06	-0.32	0.054	149	0.22	-1,291.22	253.560
	24-29	200	0.14	-0.25	0.058	77	0.27	-819.61	366.586
	30 plus	117	0.15	-0.17	0.060	29	0.13	-711.21	
Graduate	LT 18	9	-0.29	0.00		6	0.05	-76.67	
	19-23	611	0.19	-0.15	0.036	243	0.25	-2,933.37	281.344
	24-29	681	0.12	-0.18	0.030	201	0.24	-3,535.16	379.249
	30 plus	468	0.11	-0.03	0.035	101	0.06	-3,174.05	498.923
STUDENT QUESTIONNAIRE									
Mail		14,241	0.12	-0.21	0.010	5,469	0.26	-1,466.58	67.142
Telephone		12,071	0.14	-0.22	0.008	5,035	0.24	-1,234.48	67.178

STUDENT-INSTITUTIONAL COMPARISONS

	PARENT'S INCOME (DEP.)				NO. OF DEPENDENTS (IND.)			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	14,137	0.33	1.02	0.029	3,862	0.66	-1.09	0.037
INSTITUTION TYPE								
Public 4-year	4,650	0.25	1.17	0.039	1,266	0.75	-1.21	0.028
Public LT 4-year	746	0.18	1.22	0.055	319	0.58	-1.05	0.113
Private 4-year	6,657	0.30	1.03	0.157	1,151	0.73	-1.15	0.040
Private LT 4-year	763	0.35	0.95	0.094	250	0.65	-1.17	0.102
Proprietary 4-year	64	0.53	0.41	0.162	13	0.02	0.92	
Proprietary LT 4-year	1,257	0.58	0.38	0.047	863	0.51	-0.94	0.070
ATTENDANCE STATUS								
Full-time	12,958	0.35	0.94	0.030	3,205	0.65	-1.07	0.034
Part-time	1,175	0.13	1.88	0.071	657	0.69	-1.16	0.108
DEPENDENCY STATUS								
Dependent student	14,137	0.33	1.02	0.029	-	-	-	
Independent student	-	-	-	-	3,862	0.66	-1.09	0.037
GENDER								
Male	6,872	0.32	1.11	0.040	1,535	0.76	-1.01	0.038
Female	7,265	0.35	0.94	0.035	2,327	0.60	-1.13	0.060
RACE/ETHNICITY								
American Indian	71	0.64	0.55	0.231	47	0.53	-1.12	0.479
Asian	666	0.42	0.91	0.085	120	0.74	-1.00	0.149
Black	1,420	0.54	0.54	0.057	542	0.53	-0.72	0.091
Hispanic	809	0.49	0.65	0.058	274	0.62	-0.91	0.115
White	11,171	0.26	1.12	0.038	2,879	0.71	-1.17	0.039
PARENTS' INCOME								
Lt $12,000	-	-	-	-	-	-	-	
$12,000 to 24,000	-	-	-	-	-	-	-	
$24,000 to 30,000	-	-	-	-	-	-	-	
$30,000 to 50,000	-	-	-	-	-	-	-	
$50,000 to 75,000	-	-	-	-	-	-	-	
$75,000 to 100,000	-	-	-	-	-	-	-	
$100,000 plus	-	-	-	-	-	-	-	
STUDENTS' INCOME								
LT$5,000	-	-	-	-	947	0.73	-0.96	0.033
$5,000 to 10,000	-	-	-	-	813	0.77	-1.08	0.031
$10,000 to 15,000	-	-	-	-	552	0.69	-1.30	0.069
$15,000 to 20,000	-	-	-	-	403	0.78	-1.33	0.064
$20,000 plus	-	-	-	-	726	0.67	-1.67	0.069
PARENTS' EDUCATION								
LT high school	364	0.36	0.69	0.126	76	0.45	-0.93	0.170
High school only	1,164	0.27	1.38	0.090	255	0.50	-1.05	0.079
Vocational school	336	0.20	1.49	0.185	60	0.64	-0.95	0.118
2-year degree	312	0.13	1.86	0.156	82	0.61	-1.17	0.066
4-year degree	620	0.03	2.67	0.093	72	0.68	-0.99	0.076
Advanced degree	569	-0.10	3.24	0.107	69	0.83	-1.09	0.120

STUDENT-INSTITUTIONAL COMPARISONS

(continued)

	PARENT'S INCOME (DEP.)				NO. OF DEPENDENTS (IND.)			
	N	Consistency coefficient	Mean difference (bias)	std. err	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL								
First year LT 18	2,631	0.39	0.78	0.064	14	0.88	-1.21	
19-23	1,770	0.42	0.77	0.065	221	0.44	-0.94	0.115
24-29	172	0.34	0.88	0.226	364	0.59	-0.93	0.119
30 plus	49	0.28	0.80	0.294	496	0.51	-1.09	0.090
				0.269				
Second year LT 18	93	0.36	0.75		0	-	-	
19-23	2,880	0.35	0.86	0.055	128	0.62	-0.98	0.122
24-29	125	0.41	1.14	0.215	187	0.55	-0.96	0.171
30 plus	41	0.04	1.20	0.409	240	0.50	-1.10	0.156
Third year LT 18	11	0.67	0.82		-	-	-	
19-23	2,102	0.29	1.04	0.069	166	0.70	0.97	0.050
24-29	133	0.31	1.18	0.173	174	0.68	-1.22	0.102
30 plus	20	(-0.00)	1.05		175	0.77	-1.19	0.133
Fourth year LT 18	19	0.42	0.58		-	-	-	
19-23	1,743	0.23	1.15	0.056	141	0.60	-1.01	0.046
24-29	128	0.33	1.41	0.215	170	0.74	-1.06	0.058
30 plus	27	0.10	2.04		142	0.52	-1.39	0.162
Fifth year LT 18	5	0.88	0.80		-	-	-	
19-23	247	0.23	1.10	0.148	51	0.54	-1.04	0.072
24-29	63	0.14	1.37	0.273	60	0.74	-0.98	0.094
30 plus	8	-0.13	1.38		35	0.85	-0.89	0.146
Graduate LT 18	8	0.32	1.63		-	-	-	
19-23	436	0.32	1.50	0.141	31	0.63	-1.16	0.074
24-29	220	0.26	1.72	0.182	137	0.80	-1.21	0.073
30 plus	42	0.07	1.55	0.435	116	0.77	-1.22	0.127
STUDENT QUESTIONNAIRE								
Mail	7,340	0.34	0.99	0.035	2,167	0.66	-1.11	0.047
Telephone	6,797	0.32	1.06	0.042	1,695	0.67	-1.05	0.043

STUDENT-INSTITUTIONAL COMPARISONS

	AMOUNT OF SAVINGS (IND.)				STUDENT'S INCOME (IND.)			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	3,792	0.25	12,331.87	664.533	3,811	0.82	118.92	143.432
INSTITUTION TYPE								
Public 4-year	1,247	0.12	9,576.60	737.347	1,282	0.85	180.55	152.120
Public LT 4-year	1,062	0.30	8,276.49	1050.009	331	0.71	306.69	359.619
Private 4-year	14	0.15	16,778.90	1770.545	1,180	0.83	-154.22	299.905
Private LT 4-year	361	0.23	20,264.46	4513.232	236	0.79	187.42	496.201
Proprietary 4-year	240	0.29	1,817.86		11	0.92	-1,920.09	
Proprietary LT 4-year	868	0.11	10,512.09	976.463	771	0.76	362.01	432.480
ATTENDANCE STATUS								
Full-time	3,212	0.29	11,014.61	595.192	3,121	0.82	136.20	155.469
Part-time	580	0.10	19,626.76	2013.845	690	0.81	40.80	284.735
DEPENDENCY STATUS								
Dependent student	-	-	-	-	-	-	-	
Independent student	3,792	0.25	12,331.87	664.533	3,811	0.82	118.92	143.432
GENDER								
Male	1,502	0.16	10,910.21	696.260	1,590	0.83	-87.38	240.611
Female	2,290	0.29	13,264.33	881.430	2,221	0.81	266.62	163.077
RACE/ETHNICITY								
American Indian	53	-0.03	14,016.74	4368.242	48	0.87	-660.06	450.915
Asian	121	0.41	3,703.09	683.960	115	0.86	-909.13	373.971
Black	528	0.23	6,888.29	903.826	475	0.83	-363.21	239.486
Hispanic	271	0.15	7,827.01	1329.734	268	0.89	98.04	425.128
White	2,819	0.25	14,123.22	873.268	2,905	0.81	253.25	172.160
PARENTS' INCOME								
Lt $12,000	-	-	-	-	-	-	-	
$12,000 to 24,000	-	-	-	-	-	-	-	
$24,000 to 30,000	-	-	-	-	-	-	-	
$30,000 to 50,000	-	-	-	-	-	-	-	
$50,000 to 75,000	-	-	-	-	-	-	-	
$75,000 to 100,000	-	-	-	-	-	-	-	
$100,000 plus	-	-	-	-	-	-	-	
STUDENTS' INCOME								
LT$5,000	900	0.17	5,380.87	806.858	871	0.11	1,618.30	307.836
$5,000 to 10,000	750	0.54	7,839.87	1372.117	821	0.28	384.10	165.972
$10,000 to 15,000	493	0.24	10,370.24	1344.200	565	0.29	-398.92	319.839
$15,000 to 20,000	316	0.05	14,770.03	1981.924	421	0.28	-823.53	392.873
$20,000 plus	563	0.07	39,873.40	3061.775	774	0.61	-1,950.27	407.389
PARENTS' EDUCATION								
LT high school	82	0.07	3,952.72	1178.550	80	0.78	747.45	369.022
High school only	257	0.17	5,025.11	1152.443	241	0.80	281.86	412.543
Vocational school	68	(-0.00)	5,530.90	3160.180	61	0.81	885.49	720.730
2-year degree	78	0.12	2,696.96	568.735	81	0.76	286.06	346.804
4-year degree	64	0.28	2,717.20	677.190	68	0.82	145.04	468.352
Advanced degree	68	0.08	6,124.19	1798.525	84	0.82	-625.52	1115.460

STUDENT-INSTITUTIONAL COMPARISONS

(continued)

	AMOUNT OF SAVINGS (IND.)				STUDENT'S INCOME (IND.)			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL								
First year LT 18	14	-0.19	3,253.43		8	0.98	-1,162.63	
19-23	238	0.22	3,880.47	419.029	209	0.76	730.04	420.770
24-29	369	0.19	7,045.14	897.357	341	0.78	188.95	454.078
30 plus	500	0.10	17,178.05	1464.270	446	0.69	580.78	530.286
Second year LT 18	0	.	.	.	0	.	.	
19-23	141	0.22	3,729.28	1040.135	127	0.94	215.07	617.601
24-29	199	0.23	7,754.01	1203.497	200	0.82	144.77	416.600
30 plus	250	0.25	18,157.73	2865.564	243	0.87	-260.74	377.551
Third year LT 18	0	.	.	.	.	.	.	
19-23	183	0.14	1,842.98	452.585	159	0.83	-130.90	392.823
24-29	165	0.38	8,968.31	3226.951	163	0.57	757.45	820.699
30 plus	176	0.45	29,902.43	4482.473	166	0.91	-278.60	388.153
Fourth year LT 18	.	.	.	.	.	.	.	
19-23	140	0.01	2,823.61	728.170	114	0.79	-356.12	377.342
24-29	169	0.14	4,547.38	1752.317	172	0.89	-3.58	319.803
30 plus	148	0.09	22,621.30	2827.576	149	0.90	224.66	383.819
Fifth year LT 18	.	.	.	.	.	.	.	
19-23	54	0.26	745.61	206.483	50	0.95	-400.06	236.884
24-29	57	0.18	5,625.60	1017.091	57	0.87	890.40	499.325
30 plus	36	0.06	28,912.86	6836.455	40	0.95	-572.18	312.197
Graduate LT 18	.	.	.	.	.	.	.	
19-23	28	-0.04	6,448.36		31	0.87	-1,153.06	1292.420
24-29	120	0.11	16,379.08	4092.283	152	0.86	-212.46	706.437
30 plus	90	0.18	20,568.42	3697.817	145	0.89	396.41	712.536
STUDENT QUESTIONNAIRE								
Mail	2,127	0.20	11,154.38	758.253	2,323	0.85	34.71	179.420
Telephone	1,665	0.30	13,836.09	810.701	1,488	0.76	250.40	248.376

STUDENT-INSTITUTIONAL COMPARISONS

	FEDERAL TAX (IND.)				TUITION			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	1,890	0.60	67.19	29.218	24,896	0.59	-99.16	57.848
INSTITUTION TYPE								
Public 4-year	681	0.63	90.00	48.006	8,178	0.48	-108.60	50.114
Public LT 4-year	194	0.69	73.11	45.503	1,691	0.20	84.97	135.937
Private 4-year	600	0.53	76.70	100.768	10,697	0.50	-15.91	168.299
Private LT 4-year	105	0.92	18.05	82.205	1,274	0.38	18.94	248.514
Proprietary 4-year	7	1.00	5.86		92	0.58	238.40	46.901
Proprietary LT 4-year	303	0.64	11.82	58.382	2,964	0.33	-539.79	232.735
ATTENDANCE STATUS								
Full-time	1,544	0.61	42.05	31.391	20,709	0.57	-108.58	75.279
Part-time	346	0.61	179.38	73.730	4,180	0.46	-51.31	30.554
DEPENDENCY STATUS								
Dependent student	-	-	-	-	15,430	0.57	-41.67	74.038
Independent student	1,890	0.60	67.19	293.218	9,466	0.61	-192.85	54.596
GENDER								
Male	747	0.70	83.36	54.366	11,669	0.60	-84.51	68.612
Female	1,143	0.55	56.62	36.868	13,227	0.58	-112.08	58.045
RACE/ETHNICITY								
American Indian	22	0.72	49.14		170	0.46	-158.92	135.090
Asian	67	0.92	-21.64	44.879	1,163	0.63	-277.32	116.679
Black	223	0.72	-79.70	49.937	2,728	0.55	3.28	97.287
Hispanic	158	0.92	19.04	45.255	1,428	0.63	-182.82	100.482
White	1,420	0.57	100.09	38.583	19,407	0.59	-96.20	65.792
PARENTS' INCOME								
Lt $12,000	-	-	-	-	1,947	0.53	-76.05	76.662
$12,000 to 24,000	-	-	-	-	2,740	0.59	-74.31	78.863
$24,000 to 30,000	-	-	-	-	1,262	0.57	-105.74	91.518
$30,000 to 50,000	-	-	-	-	3,287	0.51	-16.15	140.571
$50,000 to 75,000	-	-	-	-	1,240	0.49	230.20	156.568
$75,000 to 100,000	-	-	-	-	181	0.52	394.12	244.199
$100,000 plus	-	-	-	-	75	0.51	707.07	393.803
STUDENTS' INCOME								
LT$ 5,000	416	0.34	133.84	44.620	1,449	0.56	-50.28	67.498
$5,000 to 10,000	386	0.19	107.04	50.262	1,247	0.60	-161.32	96.001
$10,000 to 15,000	288	0.21	77.55	91.707	744	0.65	-175.94	89.629
$15,000 to 20,000	190	0.23	179.15	115.174	552	0.62	-207.65	118.228
$20,000 plus	407	0.39	-36.75	119.378	976	0.62	-260.13	145.634
PARENTS' EDUCATION								
LT high school	25	0.39	-20.48		570	0.49	-263.47	85.719
High school only	116	0.73	8.47	87.005	1,767	0.61	-95.75	65.262
Vocational school	27	0.48	183.48		510	0.54	-65.88	90.397
2-year degree	31	0.86	-17.87	57.751	521	0.57	-317.06	87.177
4-year degree	31	0.97	-61.84	99.658	874	0.65	-40.02	118.675
Advanced degree	39	-0.02	237.79	664.340	825	0.53	-96.36	143.583

STUDENT-INSTITUTIONAL COMPARISONS

(continued)

		FEDERAL TAX (IND.)				TUITION			
		N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL									
First year	LT 18	2	-		-	2,958	0.52	112.00	85.821
	19-23	84	0.81	-22.75	42.055	2,442	0.52	-156.09	106.706
	24-29	142	0.67	121.21	76.718	888	0.50	-309.10	101.946
	30 plus	203	0.81	153.94	92.291	1,012	0.60	-446.90	68.555
Second year	LT 18	-	-	-	-	104	0.61	531.04	212.846
	19-23	61	0.78	-29.56	43.443	3,394	0.56	10.91	69.060
	24-29	92	0.43	142.03	64.185	546	0.50	-151.40	131.477
	30 plus	128	0.81	57.74	52.181	609	0.64	-187.93	52.461
Third year	LT 18	-	-	-	-	15	0.38	299.67	
	19-23	83	0.83	-19.06	41.480	2,594	0.53	-62.30	98.191
	24-29	72	0.23	320.13	327.761	523	0.71	-49.36	66.825
	30 plus	95	0.86	48.46	78.920	473	0.62	-223.96	75.696
Fourth year	LT 18	-	-	-	-	22	0.29	-894.64	
	19-23	43	0.56	-31.23	160.371	2,144	0.53	-108.70	101.724
	24-29	77	0.85	53.78	75.211	477	0.66	-188.48	89.919
	30 plus	72	0.77	150.83	61.212	386	0.56	-335.46	104.173
Fifth year	LT 18	-	-	-	-	5	1.00	2,787.00	
	19-23	36	0.64	206.39	154.938	350	0.64	-276.65	91.566
	24-29	49	0.70	-145.53	143.862	190	0.51	-234.03	120.923
	30 plus	28	0.85	75.29		114	0.27	212.98	116.357
Graduate	LT 18	-	-	-	-	8	0.02	-407.25	
	19-23	13	0.98	-67.38		591	0.64	-116.17	318.529
	24-29	75	0.88	166.03	139.499	662	0.72	-142.27	119.618
	30 plus	86	0.78	-196.78	198.966	450	0.53	-187.74	137.679
STUDENT QUESTIONNAIRE									
Mail		1,890	0.60	67.19	29.218	7,388	0.66	-183.14	59.528
Telephone		0	-	-	-	6,201	0.42	-4.47	71.349

PARENT-INSTITUTIONAL COMPARISONS

	NUMBER OF DEPENDENTS				NUMBER IN COLLEGE			
	N	Consistency coefficient	Mean difference (bias)	std.err.	N	Consistency coefficient	Mean difference (bias)	std.err.
ALL STUDENTS	2,072	0.79	0.03	0.032	2,031	0.65	0.13	0.021
INSTITUTION TYPE								
Public 4-year	656	0.81	0.06	0.051	648	0.68	0.13	0.028
Public LT 4-year	164	0.84	0.01	0.085	163	0.47	0.14	0.073
Private 4-year	750	0.84	0.04	0.027	733	0.68	0.15	0.028
Private LT 4-year	185	0.72	0.00	0.211	181	0.58	0.12	0.040
Proprietary 4-year	5	0.61	0.20		5	-0.25	0.00	
Proprietary LT 4-year	312	0.70	-0.01	0.122	301	0.42	0.11	0.061
ATTENDANCE STATUS								
Full-time	1,934	0.80	0.04	0.033	1,899	0.65	0.13	0.021
Part-time	137	0.73	-0.12	0.142	131	0.62	0.18	0.114
DEPENDENCY STATUS								
Dependent student	2,072	0.79	0.03	0.032	2,031	0.65	0.13	0.021
Independent student	0	-	-		-	-	-	
GENDER								
Male	916	0.78	0.03	0.049	898	0.62	0.15	0.035
Female	1,156	0.80	0.01	0.036	1,133	0.67	0.15	0.029
RACE/ETHNICITY								
American Indian	12	0.64	0.08		12	0.75	-0.25	
Asian	71	0.82	-0.24	0.347	71	0.49	0.14	0.229
Black	313	0.60	-0.15	0.104	299	0.60	0.02	0.049
Hispanic	137	0.75	-0.04	0.105	136	0.60	0.25	0.064
White	1,539	0.86	0.09	0.021	1,513	0.67	0.15	0.022
PARENTS' INCOME								
Lt $12,000	550	0.68	-0.06	0.094	535	0.44	0.04	0.045
$12,000 to 24,000	419	0.85	0.05	0.056	418	0.66	0.10	0.040
$24,000 to 30,000	190	0.85	0.11	0.062	185	0.64	0.18	0.066
$30,000 to 50,000	533	0.86	0.05	0.040	526	0.69	0.17	0.037
$50,000 to 75,000	227	0.86	0.10	0.038	224	0.71	0.27	0.056
$75,000 to 100,000	27	0.85	0.04		26	0.76	0.27	
$100,000 plus	19	0.87	-0.21		19	0.39	-0.11	
STUDENTS' INCOME								
Lt $5,000	-	-	-		-	-	-	
$5,000 to 10,000	-	-	-		-	-	-	
$10,000 to 15,000	-	-	-		-	-	-	
$15,000 to 20,000	-	-	-		-	-	-	
$20,000 plus	-	-	-		-	-	-	
PARENTS' EDUCATION								
LT high school	317	0.69	-0.16	0.077	305	0.56	0.09	0.034
High school only	813	0.84	0.05	0.046	801	0.58	0.12	0.031
Vocational school	225	0.75	-0.01	0.139	223	0.62	0.16	0.075
2-year degree	182	0.80	0.08	0.081	177	0.69	0.09	0.081
4-year degree	311	0.80	0.08	0.060	307	0.71	0.18	0.034
Advanced degree	210	0.89	0.20	0.061	205	0.60	0.20	0.071

PARENT-INSTITUTIONAL COMPARISONS

(continued)

	NUMBER OF DEPENDENTS				NUMBER IN COLLEGE			
	N	Consistency coefficient	Mean difference (bias)	std err.	N	Consistency coefficient	Mean difference (bias)	std err.
AGE/ACADEMIC LEVEL								
First year LT 18	422	0.76	0.12	0.052	417	0.61	0.10	0.035
19-23	376	0.78	0.05	0.079	366	0.58	0.14	0.046
24-29	38	0.84	-0.29	0.272	37	0.80	0.08	0.056
30 plus	13	-0.31	-1.31		11	-0.15	0.09	
Second year LT 18	16	0.85	0.31		15	0.53	0.27	
19-23	431	0.83	0.03	0.078	427	0.59	0.17	0.056
24-29	26	0.78	0.08		25	0.78	0.08	
30 plus	4	0.30	-0.25		4	-	0.00	
Third year LT 18	2	1.00	0.00		2	-	0.50	
19-23	273	0.84	0.02	0.093	270	0.73	0.14	0.044
24-29	13	0.91	-0.15		12	0.62	-0.08	
30 plus	3	0.98	-0.33		3	-	0.33	
Fourth year LT 18	1	-	0.00		1	-	0.00	
19-23	197	0.87	0.00	0.051	195	0.63	0.16	0.044
24-29	16	0.77	-0.38		15	0.86	-0.27	
30 plus	3	1.00	0.00		3	0.50	0.33	
Fifth year LT 18	2	-1.00	2.50		2	-	0.00	
19-23	33	0.61	0.15	0.303	32	0.73	-0.09	0.099
24-29	10	0.65	0.30		10	0.67	0.10	
30 plus	0	-	-		0	-	-	
Graduate LT 18	1	-	-		1	-	0.00	
19-23	58	0.86	-0.05		52	0.82	0.10	0.098
24-29	17	0.48	-0.35	0.134	17	0.84	0.35	
30 plus	1	-	0.00		1	-	0.00	
PARENT QUESTIONNAIRE								
Mail	1,086	0.80	0.11	0.046	1,070	0.66	0.27	0.027
Telephone	986	0.78	-0.05	0.031	961	0.66	-0.12	0.027

ADJ. GROSS INCOME

	N	Consistency coefficient	Mean difference (bias)	std err.
ALL STUDENTS	1,370	0.83	255.86	503.320
INSTITUTION TYPE				
Public 4-year	466	0.86	837.11	538.935
Public LT 4-year	98	0.74	903.65	1912.840
Private 4-year	532	0.80	-172.45	818.893
Private LT 4-year	104	0.79	380.15	1287.100
Proprietary 4-year	3	0.89	2,700.33	
Proprietary LT 4-year	167	0.81	-503.09	713.184
ATTENDANCE STATUS				
Full-time	1,291	0.83	309.52	517.653
Part-time	78	0.90	-799.81	1143.310
DEPENDENCY STATUS				
Dependent student	1,370	0.83	255.86	503.320
Independent student	0	-	-	
GENDER				
Male	629	0.87	424.09	590.798
Female	741	0.80	33.47	665.928
RACE/ETHNICITY				
American Indian	11	0.78	-4,264.91	
Asian	58	0.96	72.24	701.455
Black	142	0.91	-887.63	911.204
Hispanic	87	0.45	793.82	2567.930
White	1,072	0.84	420.00	611.909
PARENTS' INCOME				
Lt $12,000	234	0.18	4,211.28	1275.790
$12,000 to 24,000	283	0.44	1,562.36	369.618
$24,000 to 30,000	154	0.40	-232.07	338.643
$30,000 to 50,000	450	0.60	-959.69	373.997
$50,000 to 75,000	195	0.50	-2,452.16	1145.830
$75,000 to 100,000	22	0.35	-6,126.09	
$100,000 plus	15	-0.11	-17,969.27	
STUDENTS' INCOME				
Lt $5,000	-	-	-	
$5,000 to 10,000	-	-	-	
$10,000 to 15,000	-	-	-	
$15,000 to 20,000	-	-	-	
$20,000 plus	-	-	-	
PARENTS' EDUCATION				
LT high school	147	0.59	-1,472.18	1043.330
High school only	516	0.81	102.35	547.025
Vocational school	153	0.91	100.67	1037.600
2-year degree	130	0.89	1,113.00	2336.460
4-year degree	238	0.79	1,668.28	892.993
Advanced degree	179	0.78	-375.84	1186.370

PARENT-INSTITUTIONAL COMPARISONS

(continued)

ADJ. GROSS INCOME

		N	Consistency coefficient	Mean difference (bias)	std err.
AGE/ACADEMIC LEVEL					
First year	LT 18	304	0.82	-1,249.44	483.358
	19-23	222	0.75	743.59	848.698
	24-29	15	0.77	1,813.53	
	30 plus	5	0.27	3,600.80	
Second year	LT 18	8	0.79	1,245.38	
	19-23	287	0.82	1,097.16	1729.090
	24-29	15	0.92	3,238.87	
	30 plus	1	-	-5,405.00	
Third year	LT 18	1	-	0.00	
	19-23	192	0.89	-734.84	601.401
	24-29	9	0.95	-59.22	
	30 plus	0	-	-	
Fourth year	LT 18	0	-	-	
	19-23	136	0.72	1,789.89	1219.450
	24-29	9	0.88	1,619.82	
	30 plus	1	-	-6,200.00	
Fifth year	LT 18	0	-	-	
	19-23	21	0.91	1,118.81	
	24-29	7	0.99	-1,643.29	
	30 plus	0	-	-	
Graduate	LT 18	1	-	-	
	19-23	44	0.92	-660.89	1090.290
	24-29	14	0.96	-3,643.00	
	30 plus	1	-	5.00	
PARENT QUESTIONNAIRE					
Mail		938	0.88	478.56	647.501
Telephone		432	0.69	-227.69	579.255

PARENT-INSTITUTIONAL COMPARISONS

	TUITION				PARENT'S FEDERAL TAX			
	N	Consistency coefficient	Mean difference (bias)	std err.	N	Consistency coefficient	Mean difference (bias)	std err.
ALL STUDENTS	7,545	0.65	1,604.80	83.563	1,173	0.76	365.39	128.540
INSTITUTION TYPE								
Public 4-year	3,254	0.42	1,093.27	68.838	380	0.80	309.36	111.510
Public LT 4-year	807	0.16	592.44	52.893	86	0.45	933.28	512.441
Private 4-year	2,521	0.46	2,864.67	264.998	461	0.74	380.25	236.138
Private LT 4-year	462	0.48	1,583.19	320.466	95	0.83	231.59	200.580
Proprietary 4-year	14	0.46	2,060.71		4	0.96	293.50	
Proprietary LT 4-year	487	0.31	185.84	253.196	147	0.77	219.86	145.362
ATTENDANCE STATUS								
Full-time	6,626	0.64	1,684.46	98.040	1,108	0.76	6,608.00	140.664
Part-time	915	0.46	1,029.84	64.666	64	0.80	172.80	295.108
DEPENDENCY STATUS								
Dependent student	7,545	0.65	1,604.80	83.563	1,173	0.76	365.49	128.540
Independent student	0	-	-		-	-	-	
GENDER								
Male	3,771	0.66	1,657.76	103.308	521	0.78	840.22	257.750
Female	3,774	0.63	1,548.81	71.937	652	0.76	274.92	102.497
RACE/ETHNICITY								
American Indian	44	0.77	967.50	159.276	9	0.77	-223.78	
Asian	292	0.72	2,000.20	182.240	46	91.00	733.46	1126.420
Black	398	0.41	945.75	141.401	122	0.87	476.97	242.045
Hispanic	299	0.65	1,156.49	96.132	81	0.87	92.78	178.815
White	6,512	0.65	1,652.24	88.773	915	0.75	361.94	140.706
PARENTS' INCOME								
Lt $12,000	380	0.46	616.24	125.046	213	0.11	153.21	356.548
$12,000 to 24,000	331	0.55	1,295.11	133.492	249	0.19	709.51	312.089
$24,000 to 30,000	171	0.57	1,175.08	212.205	123	0.31	225.59	145.535
$30,000 to 50,000	502	0.52	1,549.83	148.794	370	0.54	81.87	136.784
$50,000 to 75,000	227	0.54	2,039.83	244.708	162	0.56	308.14	353.176
$75,000 to 100,000	24	0.52	3,843.96		23	0.04	-1,959.83	
$100,000 plus	18	0.70	3,308.72		14	0.59	8,031.79	
STUDENTS' INCOME								
Lt $5,000	-	-	-		-	-	-	
$5,000 to 10,000	-	-	-		-	-	-	
$10,000 to 15,000	-	-	-		-	-	-	
$15,000 to 20,000	-	-	-		-	-	-	
$20,000 plus	-	-	-		-	-	-	
PARENTS' EDUCATION								
LT high school	437	0.56	790.38	94.278	122	0.80	43.12	519.219
High school only	2,249	0.57	1,223.19	76.098	445	0.82	287.84	150.628
Vocational school	658	0.61	1,214.70	94.402	138	0.67	292.90	452.664
2-year degree	783	0.59	1,428.23	103.426	102	0.88	186.43	339.778
4-year degree	1,754	0.69	1,802.73	103.736	205	0.74	471.13	241.503
Advanced degree	1,616	0.67	2,399.38	184.223	156	0.63	917.80	551.014

PARENT-INSTITUTIONAL COMPARISONS

(continued)

		TUITION				PARENT'S FEDERAL TAX			
		N	Consistency coefficient	Mean difference (bias)	std err.	N	Consistency coefficient	Mean difference (bias)	std err.
AGE/ACADEMIC LEVEL									
First year	LT 18	1,353	0.60	1,575.21	85.234	257	0.82	554.91	208.139
	19-23	1,001	0.58	1,042.52	93.059	197	0.69	270.00	185.940
	24-29	59	0.68	557.86	440.802	11	0.86	1,667.36	
	30 plus	11	0.83	75.91		4	0.83	171.50	
Second year	LT 18	42	0.61	2,643.36	543.254	8	0.86	-205.00	
	19-23	1,715	0.66	1,573.12	84.587	247	0.78	464.42	314.529
	24-29	69	0.76	892.36	160.011	12	0.97	803.17	
	30 plus	6	0.61	1,359.17		0	-	-	
Third year	LT 18	6	-0.22	-627.00		2	-	0.00	
	19-23	1,165	0.62	1,605.59	115.377	166	0.80	258.72	410.764
	24-29	74	0.71	1,763.66	324.836	8	0.90	22.88	
	30 plus	3	0.86	183.33		0	-	-	
Fourth year	LT 18	8	0.74	1,206.75		0	-	-	
	19-23	973	0.62	1,838.19	146.601	106	0.47	336.81	418.691
	24-29	67	0.48	1,619.82	428.781	8	0.87	423.25	
	30 plus	8	0.97	600.00		0	-	-	
Fifth year	LT 18	3	0.92	1,141.33		1	-	0.00	
	19-23	190	0.59	1,261.33	172.580	17	0.92	374.94	
	24-29	58	0.50	570.91	228.611	5	0.99	-129.60	
	30 plus	0	-	-		0	-	-	
Graduate	LT 18	3	0.85	1,673.33		1	-	0.00	
	19-23	214	0.70	3,015.68	786.642	41	0.82	1,363.46	533.062
	24-29	81	0.77	1,923.07	489.221	12	0.96	-412.08	
	30 plus	5	0.33	2,053.60		1	-	0.00	
PARENT QUESTIONNAIRE									
Mail		4,725	0.68	1,398.69	85.853	826	0.79	364.80	139.082
Telephone		2,820	0.61	1,950.14	92.281	347	0.66	366.81	253.210

PARENT-STUDENT COMPARISONS

	TUITION				ROOM AND BOARD			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
L STUDENTS	8,126	0.64	-1,427.25	51.951	6,681	0.20	-771.80	30.581
STITUTION TYPE								
Public 4-year	3,496	0.46	-1,113.63	39.179	2,876	0.16	-703.85	37.827
Public LT 4-year	825	0.27	-509.54	54.764	760	0.06	-66.91	19.946
Private 4-year	2,759	0.49	-2,423.77	143.235	2,163	0.17	-1,301.41	79.160
Private LT 4-year	472	0.58	-1,135.00	188.444	367	0.26	-813.47	210.422
Proprietary 4-year	20	0.28	-1,492.35		16	0.05	-494.88	
Proprietary LT 4-year	554	0.32	-56.84	185.138	499	-0.01	80.36	44.946
TTENDANCE STATUS								
Full-time	7,067	0.63	-1,514.07	60.397	5,677	0.18	-870.60	32.532
Part-time	1,055	0.58	-846.62	70.940	1,001	0.17	-211.06	32.439
EPENDENCY STATUS								
Dependent student	7,160	0.67	-1,471.66	52.841	5,720	0.19	-861.70	33.370
Independent student	966	0.46	-1,098.14	88.414	961	0.18	-236.75	31.855
ENDER								
Male	4,112	0.66	-1,552.80	77.038	3,344	0.18	-771.07	32.216
Female	4,014	0.62	-1,298.65	38.789	3,337	0.21	-772.55	38.908
ACE/ETHNICITY								
American Indian	45	0.85	-750.22	157.624	37	0.09	-331.84	132.515
Asian	312	0.70	-1,967.44	179.126	256	0.27	-1,067.04	106.086
Black	443	0.51	-336.98	107.157	425	0.15	-316.25	57.902
Hispanic	312	0.58	-1,019.01	105.455	282	0.08	-274.38	66.717
White	7,014	0.65	-1,494.59	54.528	5,681	0.21	-820.14	33.568
ARENTS' INCOME								
Lt $12,000	345	0.48	-649.33	127.024	315	0.12	-318.15	153.375
$12,000 to 24,000	318	0.48	-1,488.61	126.334	279	0.13	-833.53	131.978
$24,000 to 30,000	161	0.61	-1,119.83	189.965	132	0.15	-770.27	148.254
$30,000 to 50,000	486	0.60	-1,648.47	95.274	383	0.17	-1,027.41	88.468
$50,000 to 75,000	214	0.50	-1,822.72	183.239	160	0.09	-1,800.83	236.507
$75,000 to 100,000	23	0.51	-2,377.61		18	0.47	-1,425.67	
$100,000 plus	18	0.66	-2,215.17		14	0.12	-2,097.93	
TUDENTS' INCOME								
LT $5,000	218	0.49	-1,182.94	191.674	220	0.29	-415.65	91.326
$5,000 to 10,000	176	0.40	-825.87	213.992	194	0.14	-243.80	74.086
$10,000 to 15,000	61	0.76	-1,453.48	250.355	69	-0.02	-43.80	104.389
$15,000 to 20,000	43	0.47	-419.65	298.013	48	-0.08	92.06	20.039
$20,000 plus	34	0.42	-1,592.91	467.550	32	0.12	-177.94	144.356
ARENTS' EDUCATION								
LT high school	504	0.55	-636.48	96.386	479	0.09	-197.28	45.265
High school only	2,435	0.60	-1,148.83	54.511	2,085	0.16	-490.64	31.073
Vocational school	732	0.56	-1,066.26	76.078	615	0.11	-498.32	83.923
2-year degree	864	0.61	-1,291.15	78.519	717	0.22	-763.88	59.286
4-year degree	1,837	0.63	-1,633.74	71.589	1,433	0.27	-1,035.81	49.689
Advanced degree	1,704	0.68	-2,072.93	111.927	1,305	0.17	-1,284.61	111.927

PARENT-STUDENT COMPARISONS

(continued)

	TUITION				ROOM AND BOARD			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL								
First year LT 18	1,299	0.66	-1,265.47	53.562	1,012	0.20	-1,197.58	69.876
19-23	1,043	0.60	-773.69	77.552	876	0.31	-520.77	40.599
24-29	91	0.69	-423.78	209.113	96	0.19	-350.77	277.777
30 plus	25	0.93	-330.48		25	-0.04	-126.80	
Second year LT 18	41	0.64	-2,070.78	392.842	34	0.27	-1,431.18	342.907
19-23	1,724	0.66	-1,357.72	79.346	1,420	0.18	-978.77	46.794
24-29	90	0.61	-783.97	183.103	91	0.09	-96.43	37.995
30 plus	17	0.65	305.53		12	-	33.00	
Third year LT 18	6	0.20	1,303.33		6	-	35.00	
19-23	1,241	0.64	-1,474.70	69.853	990	0.24	-783.70	54.001
24-29	101	0.64	-1,505.44	168.452	104	0.01	-198.32	78.180
30 plus	10	0.95	-533.00		11	-0.10	20.00	
Fourth year LT 18	8	0.72	-893.75		6	-	186.33	
19-23	1,040	0.67	-1,594.75	100.187	824	0.17	-918.13	76.944
24-29	87	0.55	-1,387.24	286.914	95	0.17	-136.15	126.350
30 plus	16	0.39	-1,481.69		14	0.14	67.50	
Fifth year LT 18	2	1.00	-597.50		3	-	40.00	
19-23	209	0.38	-1,091.81	237.820	170	0.18	-290.01	88.084
24-29	71	0.62	-807.79	165.584	57	0.06	-162.02	122.518
30 plus	4	0.75	-103.75		3	-	5.00	
Graduate LT 18	3	0.10	65.00		3	-	350.00	
19-23	247	0.68	-3,147.97	442.466	209	0.12	-579.91	235.815
24-29	134	0.60	-1,981.56	366.870	117	0.13	-519.91	244.781
30 plus	13	0.76	-2,334.31		14	-	86.79	
STUDENT QUESTIONNAIRE								
Mail	4,458	0.68	-1,454.44	59.799	3,430	0.26	-622.86	37.002
Telephone	3,668	0.59	-1,394.21	58.417	3,251	0.13	-928.95	37.957
PARENT QUESTIONNAIRE								
Mail	5,099	0.69	-1,149.23	62.428	3,900	0.22	-840.68	37.999
Telephone	3,027	0.58	-1,895.60	59.842	2,781	0.15	-675.21	32.997

PARENT-STUDENT COMPARISONS

	EVER APPLY FOR AID				PARENT LOANS TO STUDENT			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	11,121	0.41	-0.22	0.012	7,400	0.17	-248.67	28.479
INSTITUTION TYPE								
Public 4-year	4,679	0.43	-0.19	0.012	3,281	0.19	-192.48	27.706
Public LT 4-year	1,236	0.39	-0.29	0.027	688	0.17	-227.71	52.447
Private 4-year	3,547	0.43	-0.20	0.017	2,513	0.16	-320.14	78.938
Private LT 4-year	650	0.35	-0.25	0.090	432	0.10	-304.81	120.593
Proprietary 4-year	24	0.49	-0.42		13	-0.17	-1,566.00	
Proprietary LT 4-year	985	0.24	-0.34	0.037	473	0.24	-201.76	78.452
ATTENDANCE STATUS								
Full-time	9,204	0.43	-0.19	0.010	6,578	0.16	-264.32	31.743
Part-time	1,911	0.33	-0.38	0.026	818	0.32	-124.69	58.572
DEPENDENCY STATUS								
Dependent student	8,783	0.49	-0.14	0.008	6,849	0.17	-259.26	29.183
Independent student	2,338	0.33	-0.52	0.031	551	0.25	-117.11	62.086
GENDER								
Male	5,460	0.43	-0.21	0.011	3,695	0.22	-172.69	35.600
Female	5,661	0.39	-0.23	0.016	3,705	0.12	-324.45	38.296
RACE/ETHNICITY								
American Indian	68	0.46	-0.34	0.126	40	0.67	41.25	315.626
Asian	390	0.35	-0.29	0.056	273	-0.01	-627.60	175.584
Black	819	0.19	-0.30	0.044	385	0.28	-318.04	47.816
Hispanic	476	0.38	-0.21	0.046	272	0.32	-340.58	102.010
White	9,368	0.43	-0.21	0.011	6,430	0.17	-226.35	32.262
PARENTS' INCOME								
Lt $12,000	571	0.12	-0.15	0.036	221	0.01	-162.70	106.320
$12,000 to 24,000	431	0.16	-0.12	0.031	273	0.31	-120.92	82.300
$24,000 to 30,000	199	0.15	-0.06	0.031	150	0.24	-179.11	143.183
$30,000 to 50,000	551	0.13	-0.05	0.011	463	0.07	-350.00	98.592
$50,000 to 75,000	352	0.15	-0.06	0.035	218	0.08	-336.47	201.243
$75,000 to 100,000	28	0.47	-0.11		25	-0.09	-590.00	
$100,000 plus	19	0.24	-0.11		18	-0.15	-2,450.00	
STUDENTS' INCOME								
LT $5,000	471	0.15	-0.32	0.036	140	0.56	-358.04	159.657
$5,000 to 10,000	396	0.05	-0.36	0.050	112	0.56	1.66	111.490
$10,000 to 15,000	161	-0.04	-0.43	0.104	32	0.10	-222.75	159.655
$15,000 to 20,000	91	-0.09	-0.52	0.152	21	0.03	-1,190.48	
$20,000 plus	103	0.03	-0.76	0.118	26	-0.03	-760.00	
PARENTS' EDUCATION								
LT high school	869	0.31	-0.25	0.034	370	0.08	-264.82	81.999
High school only	3,374	0.47	-0.15	0.016	2,093	0.13	-261.38	42.156
Vocational school	962	0.51	-0.13	0.025	635	0.21	-306.10	78.050
2-year degree	1,108	0.51	-0.15	0.029	795	0.24	-387.62	64.420
4-year degree	2,204	0.52	-0.13	0.018	1,782	0.16	-260.85	47.505
Advanced degree	2,012	0.51	-0.11	0.014	1,680	0.19	-129.51	48.418

PARENT-STUDENT COMPARISONS

(continued)

		EVER APPLY FOR AID				PARENT LOANS TO STUDENT			
		N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL									
First year	LT 18	1,516	0.50	-0.16	0.021	1,285	0.06	-366.67	54.841
	19-23	1,513	0.37	-0.24	0.025	892	0.18	-255.37	51.866
	24-29	202	0.35	-0.49	0.109	60	0.28	-99.70	307.303
	30 plus	83	0.24	-0.87	0.076	13	-0.14	-18.23	
Second year	LT 18	50	0.53	-0.02	0.099	43	-0.04	-638.60	355.971
	19-23	2,119	0.48	-0.16	0.023	1,630	0.10	-282.81	54.352
	24-29	190	0.21	-0.37	0.078	68	0.20	-238.01	267.363
	30 plus	50	0.14	-0.96	0.231	7	-	-114.30	
Third year	LT 18	8	0.75	0.13		4	-	100.00	
	19-23	1,537	0.53	-0.13	0.016	1,138	0.11	-310.43	57.910
	24-29	180	0.26	-0.45	0.075	66	0.07	-871.76	333.379
	30 plus	45	0.19	-0.91	0.169	2	-	-200.00	
Fourth year	LT 18	9	0.80	-0.22		6	-	-833.33	
	19-23	1,318	0.47	-0.14	0.021	1,016	0.14	-100.18	60.075
	24-29	154	0.30	-0.34	0.072	74	0.41	93.34	203.116
	30 plus	48	0.37	-0.73	0.211	10	0.02	-1,062.00	
Fifth year	LT 18	4	0.58	0.25		3	-	666.67	
	19-23	292	0.34	-0.21	0.035	193	0.17	-259.24	101.239
	24-29	102	0.35	-0.28	0.106	54	-0.11	54.28	156.391
	30 plus	12	-0.16	-0.42		2	-	-750.00	
Graduate	LT 18	3	1.00	-0.33		2	-	250.00	
	19-23	339	0.37	-0.10	0.051	225	0.17	96.83	186.875
	24-29	230	0.33	-0.29	0.053	88	0.24	507.95	288.131
	30 plus	56	0.19	-1.02	0.176	9	- -	-641.67	-
STUDENT QUESTIONNAIRE									
Mail		6,090	0.42	-0.20	0.014	3,964	0.20	-257.66	39.473
Telephone		5,031	0.40	-0.24	0.016	3,436	0.13	-238.31	33.294
PARENT QUESTIONNAIRE									
Mail		6,137	0.46	-0.21	0.013	4,307	0.17	-425.84	43.084
Telephone		4,984	0.34	-0.23	0.019	3,093	0.17	-1.97	30.764

PARENT-STUDENT COMPARISONS

	PARENT'S CONTRIBUTION				AMT OF PARENT'S CONTRIBUTION			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	11,121	0.56	-0.73	0.015	7,406	0.54	930.09	58.450
INSTITUTION TYPE								
Public 4-year	4,679	0.57	-0.67	0.016	3,283	0.43	875.14	81.477
Public LT 4-year	1,236	0.50	-0.94	0.032	688	0.32	1,129.00	145.523
Private 4-year	3,547	0.59	-0.63	0.030	2,517	0.49	955.39	171.122
Private LT 4-year	650	0.51	-0.74	0.138	432	0.47	1,041.63	393.359
Proprietary 4-year	24	0.44	-1.04		13	0.18	160.31	
Proprietary LT 4-year	985	0.48	-1.11	0.040	473	0.52	806.88	161.311
ATTENDANCE STATUS								
Full-time	9,204	0.54	-0.62	0.013	6,584	0.54	973.90	61.821
Part-time	1,911	0.55	-1.24	0.027	818	0.44	588.74	160.262
DEPENDENCY STATUS								
Dependent student	8,783	0.46	-0.49	0.014	6,854	0.54	1,091.58	61.433
Independent student	2,338	0.34	-1.61	0.013	552	0.34	-1,074.98	138.793
GENDER								
Male	5,460	0.54	-0.72	0.017	3,700	0.61	805.16	93.824
Female	5,661	0.59	-0.74	0.019	3,706	0.48	1,054.81	82.841
RACE/ETHNICITY								
American Indian	68	0.37	-0.87	0.170	40	0.78	2,513.15	741.585
Asian	390	0.55	-0.62	0.055	273	0.67	1,151.62	351.736
Black	819	0.43	-1.09	0.051	385	0.42	793.49	235.259
Hispanic	476	0.51	-0.90	0.048	272	0.55	974.10	330.461
White	9,368	0.58	-0.69	0.016	6,436	0.53	917.17	58.420
PARENTS' INCOME								
Lt $12,000	571	0.29	-1.20	0.048	221	0.57	117.26	162.551
$12,000 to 24,000	431	0.42	-0.80	0.044	273	0.38	717.25	352.988
$24,000 to 30,000	199	0.48	-0.55	0.074	150	0.49	730.07	301.453
$30,000 to 50,000	551	0.34	-0.40	0.040	463	0.56	811.36	185.928
$50,000 to 75,000	241	0.40	-0.26	0.057	219	0.56	273.21	381.309
$75,000 to 100,000	28	0.25	-0.21		25	0.73	1,235.60	
$100,000 plus	19	0.69	-0.16		18	0.79	862.22	
STUDENTS' INCOME								
LT $5,000	471	0.21	-1.52	0.032	141	0.25	-1,046.28	236.407
$5,000 to 10,000	396	0.32	-1.56	0.047	112	0.42	-683.33	203.773
$10,000 to 15,000	141	0.44	-1.68	0.045	32	0.38	-1,198.50	313.446
$15,000 to 20,000	91	0.20	-1.62	0.058	21	0.36	-1,239.52	
$20,000 plus	103	0.33	-1.60	0.066	26	0.29	-2,543.88	
PARENTS' EDUCATION								
LT high school	869	0.49	-1.19	0.034	370	0.55	939.95	175.076
High school only	3,374	0.54	-0.82	0.021	2,095	0.52	920.86	114.860
Vocational school	962	0.51	-0.74	0.037	635	0.49	884.41	176.392
2-year degree	1,108	0.47	-0.64	0.034	797	0.39	692.96	210.855
4-year degree	2,204	0.49	-0.45	0.027	1,783	0.59	1,036.85	150.200
Advanced degree	2,012	0.50	-0.42	0.020	1,681	0.55	946.31	131.797

PARENT-STUDENT COMPARISONS

(continued)

	PARENT'S CONTRIBUTION				AMT OF PARENT'S CONTRIBUTION			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL								
First year LT 18	1,516	0.32	-0.33	0.022	1,286	0.59	1,388.16	147.347
19-23	1,513	0.53	-0.88	0.036	892	0.53	990.47	156.136
24-29	202	0.35	-1.51	0.065	60	0.71	-410.05	335.030
30 plus	83	0.46	-1.65	0.083	13	0.52	941.92	
Second year LT 18	50	0.26	-0.32	0.100	43	0.54	1,872.60	555.119
19-23	2,119	0.52	-0.52	0.023	1,630	0.59	1,092.35	136.337
24-29	190	0.51	-1.37	0.084	68	0.72	839.49	1127.360
30 plus	50	0.52	-1.78	0.150	7	0.87	-304.43	
Third year LT 18	9	0.26	-0.88		4	-0.43	1,487.50	
19-23	1,537	0.52	-0.56	0.019	1,138	0.57	1,047.96	153.284
24-29	180	0.62	-1.31	0.070	67	0.49	-499.76	653.599
30 plus	45	-0.05	-1.91	0.041	2	1.00	-550.00	
Fourth year LT 18	9	0.50	-0.44		6	0.81	3,100.00	
19-23	1,318	0.48	-0.52	0.026	1,017	0.65	1,205.76	120.325
24-29	154	0.55	-1.12	0.077	74	0.45	-228.68	452.842
30 plus	48	0.43	-1.67	0.098	10	0.76	-870.00	
Fifth year LT 18	4	0.58	-0.75		3	0.86	133.33	
19-23	292	0.57	-0.74	0.050	193	0.23	142.00	420.109
24-29	102	0.44	-1.08	0.092	54	0.32	456.31	538.987
30 plus	12	0.67	-1.75		2	1.00	4,250.00	
Graduate LT 18	3	0.50	-1.00		2	1.00	1,350.00	
19-23	339	0.50	-81.00	0.067	226	0.64	828.62	367.279
24-29	230	0.56	-1.32	0.047	88	0.55	-803.18	948.992
30 plus	56	0.47	-1.73	0.040	9	0.96	287.22	
STUDENT QUESTIONNAIRE								
Mail	6,090	0.62	-0.75	0.019	3,967	0.61	1,128.33	82.053
Telephone	5,031	0.50	-0.70	0.019	3,439	0.49	701.42	107.254
PARENT QUESTIONNAIRE								
Mail	6,137	0.60	-0.64	0.020	4,312	0.60	1,184.41	82.913
Telephone	4,984	0.51	-0.84	0.020	3,094	0.48	575.67	83.507

PARENT-STUDENT COMPARISONS

	MOTHER'S EDUCATION				FATHER'S EDUCATION			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	10,130	0.63	0.44	0.036	9,108	0.69	-0.37	0.047
INSTITUTION TYPE								
Public 4-year	4,327	0.65	0.33	0.029	3,957	0.69	-0.44	0.040
Public LT 4-year	1,107	0.49	0.61	0.115	963	0.55	-0.24	0.051
Private 4-year	3,236	0.67	0.39	0.049	2,991	0.71	-0.45	0.139
Private LT 4-year	585	0.57	0.52	0.241	524	0.65	-0.12	0.139
Proprietary 4-year	21	0.68	0.33		18	0.19	0.83	
Proprietary LT 4-year	854	0.39	0.91	0.160	655	0.51	-0.01	0.108
ATTENDANCE STATUS								
Full-time	8,545	0.64	0.44	0.035	7,710	0.70	-0.40	0.038
Part-time	1,579	0.54	0.43	0.096	1,393	0.62	-0.20	0.132
DEPENDENCY STATUS								
Dependent student	8,336	0.64	0.47	0.039	7,555	0.70	-0.42	0.050
Independent student	1,794	0.58	0.30	0.092	1,553	0.64	-0.15	0.114
GENDER								
Male	5,008	0.62	0.50	0.051	4,586	0.68	-0.45	0.055
Female	5,122	0.64	0.38	0.053	4,522	0.70	-0.29	0.070
RACE/ETHNICITY								
American Indian	62	0.45	1.16	0.611	51	0.46	0.33	0.728
Asian	353	0.66	0.47	0.292	341	0.63	-0.46	0.289
Black	719	0.44	0.96	0.234	428	0.52	0.58	0.198
Hispanic	440	0.52	0.50	0.280	356	0.37	0.12	0.222
White	8,556	0.65	0.39	0.041	7,932	0.70	-0.45	0.043
PARENTS' INCOME								
Lt $12,000	521	0.38	1.28	0.312	269	0.55	0.02	0.254
$12,000 to 24,000	404	0.50	0.42	0.231	293	0.53	0.11	0.249
$24,000 to 30,000	184	0.62	0.46	0.281	164	0.64	-0.31	0.302
$30,000 to 50,000	530	0.65	0.14	0.163	515	0.67	-0.26	0.145
$50,000 to 75,000	232	0.65	0.50	0.143	233	0.65	-0.51	0.164
$75,000 to 100,000	28	0.65	0.86		27	0.54	-1.22	
$100,000 plus	19	0.95	0.11		19	0.70	-0.74	
STUDENTS' INCOME								
LT $5,000	404	0.60	0.19	0.167	351	0.58	0.25	0.180
$5,000 to 10,000	344	0.58	0.43	0.137	299	0.66	-0.26	0.230
$10,000 to 15,000	136	0.66	0.18	0.306	117	0.69	-0.07	0.206
$15,000 to 20,000	72	0.43	0.22	0.673	65	0.70	-0.74	0.730
$20,000 plus	76	0.52	0.57	0.318	70	0.57	-1.00	0.466
PARENTS' EDUCATION								
LT high school	816	0.14	1.56	0.186	634	0.18	0.85	0.237
High school only	3,257	0.33	0.44	0.079	2,809	0.46	-0.24	0.073
Vocational school	925	0.31	0.46	0.125	789	0.43	-0.27	0.121
2-year degree	1,066	0.31	-0.28	0.121	951	0.33	-0.62	0.130
4-year degree	2,132	0.45	0.36	0.070	2,030	0.29	-0.49	0.074
Advanced degree	1,928	0.45	0.44	0.076	1,885	0.24	-0.76	0.086

PARENT-STUDENT COMPARISONS

(continued)

	MOTHER'S EDUCATION				FATHER'S EDUCATION			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL								
First year LT 18	1,446	0.62	0.50	0.092	1,319	0.67	-0.43	0.134
19-23	1,378	0.52	0.67	0.121	1,161	0.62	-0.20	0.119
24-29	165	0.50	0.84	0.300	127	0.61	0.05	0.480
30 plus	48	0.30	0.69	0.553	32	0.59	-0.09	0.649
Second year LT 18	49	0.72	0.33	0.436	40	0.81	-0.43	0.456
19-23	1,989	0.63	0.46	0.084	1,822	0.66	-0.46	0.119
24-29	154	0.56	0.75	0.439	135	0.65	-0.25	0.408
30 plus	24	0.57	-0.50		17	0.91	0.59	
Third year LT 18	6	0.09	1.50		4	0.61	1.75	
19-23	1,453	0.68	0.42	0.083	1,315	0.71	-0.41	0.070
24-29	146	0.59	0.75	0.244	133	0.59	-0.80	0.392
30 plus	21	0.62	0.52		15	0.98	-0.33	
Fourth year LT 18	9	0.84	0.22		7	0.96	0.71	
19-23	1,254	0.64	0.42	0.083	1,170	0.70	-0.38	0.080
24-29	139	0.53	0.06	0.288	116	0.54	-0.83	0.401
30 plus	30	0.39	-0.03	0.791	29	0.77	-0.76	
Fifth year LT 18	3	-	3.33		3	1.00	0.00	
19-23	278	0.68	-0.06	0.127	258	0.76	-0.15	0.227
24-29	88	0.72	0.10	0.204	87	0.83	-0.23	0.210
30 plus	7	0.45	-0.86		8	0.42	-0.88	
Graduate LT 18	3	0.97	-0.67		3	-0.36	1.33	
19-23	320	0.73	0.27	0.142	295	0.78	-0.52	0.124
24-29	198	0.68	0.42	0.264	180	0.69	-0.61	0.252
30 plus	31	0.59	0.68	0.667	25	0.62	0.36	
STUDENT QUESTIONNAIRE								
Mail	5,537	0.80	0.02	0.029	5,014	0.85	0.07	0.052
Telephone	4,593	0.46	0.95	0.091	4,094	0.50	-0.91	0.081
PARENT QUESTIONNAIRE								
Mail	5,715	0.68	0.32	0.033	5,318	0.72	-0.39	0.043
Telephone	4,415	0.56	0.59	0.075	3,790	0.63	-0.35	0.094

PARENT-STUDENT COMPARISONS

	NUMBER OF WEEKS AT HOME				CLAIM AS EXEMPTION			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	5,461	0.87	0.82	0.459	11,121	0.36	-0.56	0.082
INSTITUTION TYPE								
Public 4-year	2,471	0.88	0.93	0.435	4,679	0.34	-0.34	0.067
Public LT 4-year	573	0.82	0.05	1.229	1,236	0.35	-0.92	0.163
Private 4-year	1,809	0.86	1.54	0.507	3,547	0.41	-0.50	0.143
Private LT 4-year	223	0.82	-0.81	9.895	650	0.30	-0.46	0.407
Proprietary 4-year	8	0.91	4.88		24	-0.17	-1.54	
Proprietary LT 4-year	377	0.84	-1.40	1.367	985	0.29	-1.44	0.281
ATTENDANCE STATUS								
Full-time	4,605	0.87	1.08	0.347	9,204	0.29	-0.25	0.073
Part-time	856	0.89	-0.61	1.267	1,911	0.44	-2.04	0.197
DEPENDENCY STATUS								
Dependent student	4,563	0.85	1.85	0.468	8,783	0.21	0.07	0.069
Independent student	898	0.66	-4.44	1.025	2,338	0.36	-2.94	0.276
GENDER								
Male	2,602	0.88	0.18	0.464	5,460	0.34	-0.31	0.096
Female	2,859	0.86	1.40	0.765	5,661	0.38	-0.80	0.112
RACE/ETHNICITY								
American Indian	42	0.79	-3.74	12.174	68	0.42	-0.40	0.608
Asian	234	0.88	2.36	1.630	390	0.38	0.28	0.302
Black	299	0.71	-1.06	2.293	819	0.39	-1.02	0.386
Hispanic	281	0.83	-0.19	1.998	476	0.44	-0.30	0.321
White	4,605	0.88	0.96	0.439	9,368	0.35	-0.57	0.088
PARENTS' INCOME								
Lt $12,000	275	0.82	3.84	1.370	571	0.18	-0.57	0.320
$12,000 to 24,000	222	0.79	0.86	2.099	431	0.32	-0.38	0.209
$24,000 to 30,000	98	0.92	1.69	0.984	199	0.18	-0.11	0.158
$30,000 to 50,000	283	0.89	-0.78	1.025	551	0.16	0.03	0.115
$50,000 to 75,000	110	0.91	2.54	1.138	241	0.10	-0.07	0.290
$75,000 to 100,000	13	0.96	3.92		28	0.07	0.43	
$100,000 plus	9	0.93	-7.00		19	0.36	0.58	
STUDENTS' INCOME								
LT $5,000	214	0.58	-5.42	2.453	471	0.37	-1.08	0.323
$5,000 to 10,000	179	0.62	-4.62	1.994	396	-0.01	-1.72	0.503
$10,000 to 15,000	65	0.71	-3.38	1.495	161	0.39	-2.01	0.795
$15,000 to 20,000	38	0.73	-3.32	5.734	91	0.18	-2.80	0.152
$20,000 plus	34	0.96	-1.74	1.164	103	0.24	-4.36	0.118
PARENTS' EDUCATION								
LT high school	426	0.84	-1.50	1.486	869	0.14	-0.02	0.166
High school only	1,717	0.87	0.79	0.829	3,374	0.26	0.14	0.059
Vocational school	488	0.90	0.53	1.308	962	0.18	0.17	0.109
2-year degree	536	0.83	1.85	1.277	1,108	0.13	0.29	0.174
4-year degree	1,166	0.87	1.73	1.003	2,204	0.17	0.30	0.081
Advanced degree	1,095	0.86	0.51	0.821	2,012	0.15	0.65	0.087

PARENT-STUDENT COMPARISONS

(continued)

	NUMBER OF WEEKS AT HOME				CLAIM AS EXEMPTION			
	N	Consistency coefficient	Mean difference (bias)	std. err.	N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL								
First year LT 18	714	0.45	5.94	1.357	1,516	0.16	0.58	0.148
19-23	631	0.81	1.29	1.533	1,513	0.22	-0.56	0.189
24-29	77	0.87	-2.77	2.324	202	0.28	-2.31	1.027
30 plus	20	0.78	-10.30		83	0.50	-5.53	1.521
Second year LT 18	21	0.89	1.19		50	0.32	0.22	0.349
19-23	1,059	0.82	2.50	0.908	2,119	0.20	0.06	0.141
24-29	68	0.84	-2.49	2.117	190	0.18	-2.01	0.638
30 plus	8	1.00	1.38		50	0.34	-8.60	2.114
Third year LT 18	2	-	0.00		8	0.67	-0.38	
19-23	811	0.85	-0.32	0.947	1,537	0.21	-0.09	0.131
24-29	67	0.91	-2.96	2.795	180	0.25	-2.04	0.804
30 plus	17	0.99	1.24		45	0.32	-8.24	1.877
Fourth year LT 18	1	-	0.00		9	0.28	0.44	
19-23	667	0.87	-0.97	0.740	1,318	0.31	-0.28	0.139
24-29	62	0.89	-4.26	2.480	154	0.46	-1.06	0.480
30 plus	9	0.94	-4.00		48	0.47	-3.63	1.752
Fifth year LT 18	4	1.00	-1.14		4	0.26	0.25	
19-23	226	0.86	-3.23	1.133	292	0.45	0.08	0.267
24-29	76	0.93	-3.86	1.699	102	0.41	-0.56	0.523
30 plus	5	1.00	10.80		12	0.35	-4.17	
Graduate LT 18	2	1.00	-6.00		3	1.00	1.00	
19-23	22	0.86	0.12	1.453	339	0.15	-0.40	0.444
24-29	121	0.78	-0.02	3.115	230	0.11	-1.36	0.505
30 plus	16	0.96	-4.25		56	0.37	-6.73	2.037
STUDENT QUESTIONNAIRE								
Mail	5,461	0.87	0.82	0.459	6,090	0.42	-0.23	0.095
Telephone	0	-	-		5,031	0.28	-0.96	0.130
PARENT QUESTIONNAIRE								
Mail	3,660	0.89	0.53	0.520	6,137	0.40	-0.08	0.103
Telephone	1,801	0.83	1.40	0.799	4,984	0.33	-1.15	0.152

PARENTS INCOME (CATEGORICAL)

	N	Consistency coefficient	Mean difference (bias)	std. err.
ALL STUDENTS	7,082	0.72	0.04	0.020
INSTITUTION TYPE				
Public 4-year	3,113	0.70	0.03	0.019
Public LT 4-year	732	0.70	0.12	0.062
Private 4-year	2,292	0.71	0.01	0.019
Private LT 4-year	404	0.72	0.05	0.057
Proprietary 4-year	14	0.68	0.29	
Proprietary LT 4-year	527	0.70	0.23	0.068
ATTENDANCE STATUS				
Full-time	6,061	0.73	0.05	0.017
Part-time	1,016	0.65	0.00	0.058
DEPENDENCY STATUS				
Dependent student	5,975	0.73	0.02	0.020
Independent student	1,107	0.61	0.16	0.061
GENDER				
Male	3,604	0.72	0.01	0.029
Female	3,478	0.72	0.07	0.027
RACE/ETHNICITY				
American Indian	34	0.86	0.35	0.186
Asian	239	0.75	0.08	0.081
Black	420	0.73	0.05	0.100
Hispanic	298	0.79	0.00	0.108
White	6,091	0.69	0.04	0.023
PARENTS' INCOME				
<$12,000	255	0.61	0.12	0.063
12K to 24K	302	0.48	0.04	0.075
24K to 30K	156	0.59	0.39	0.098
30K to 50K	459	0.44	0.06	0.049
50K to 75K	185	0.25	0.04	0.080
75K to 100K	17	0.77	0.18	
100K plus	14	0.78	0.00	
STUDENTS' INCOME				
LT 5K	270	0.65	0.40	0.087
5K to 10K	222	0.60	0.13	0.130
10K to 15K	85	0.58	0.21	0.279
15K to 20K	45	0.51	0.09	0.370
20K plus	45	0.52	0.04	0.246
PARENTS' EDUCATION				
LT high school	452	0.69	0.05	0.089
High school only	2,175	0.73	0.08	0.034
Vocational school	656	0.69	0.05	0.063
2-year degree	754	0.64	0.04	0.071
4-year degree	1,532	0.64	0.02	0.039
Advanced degree	1,498	0.50	0.01	0.035

PARENT-STUDENT COMPARISONS

(continued)

PARENTS INCOME (CATEGORICAL)

		N	Consistency coefficient	Mean difference (bias)	std. err.
AGE/ACADEMIC LEVEL					
First year	LT 18	1,051	0.76	0.06	0.054
	19-23	918	0.72	0.10	0.072
	24-29	87	0.68	0.14	0.180
	30 plus	17	0.84	0.59	
Second year	LT 18	39	0.84	0.23	0.257
	19-23	1,448	0.72	0.05	0.043
	24-29	92	0.62	0.03	0.210
	30 plus	8	0.59	0.13	
Third year	LT 18	6	0.68	1.00	
	19-23	1,078	0.70	0.02	0.035
	24-29	98	0.78	0.07	0.153
	30 plus	9	0.59	0.44	
Fourth year	LT 18	7	0.66	0.43	
	19-23	912	0.68	0.01	0.047
	24-29	88	0.73	0.05	0.105
	30 plus	15	0.81	0.07	
Fifth year	LT 18	0			
	19-23	202	0.69	0.03	0.089
	24-29	72	0.51	0.19	0.182
	30 plus	4	0.90	0.25	
Graduate	LT 18	2	1.00	0.50	
	19-23	231	0.68	0.05	0.105
	24-29	123	0.63	0.12	0.163
	30 plus	14	0.69	0.29	
STUDENT QUESTIONNAIRE					
Mail		3,849	0.73	0.07	0.027
Telephone		3,233	0.71	0.01	0.032
PARENT QUESTIONNAIRE					
Mail		4,057	0.75	0.04	0.027
Telephone		3,025	0.68	0.04	0.030

Appendix D

Data Items With Differences in Wording Between Respondents

Student-Institution Records

Tuition and fees

Institution: What were the total tuition and required fees charged prior to any discounts or allowances (for the fall term or program specific charges, whichever is appropriate)?

Student: How much did you pay to the school you were attending? For tuition? For fees?

Receive federal aid

Institution: Program-by-program specific questions. For example, Pell Grants.

Student: Source of award by type of award. For example, Grants/Scholarships-Federal.

Amount of federal aid

Institution: Program-by-program amounts and length of award in months.

Student: Amount of award by source of award by type of award. Amounts for entire school year.

Parents' income

Institution: Parent's IRS adjusted gross income

Student: In studies such as this, families sometimes are divided into groups according to how much money they make in a year. Please indicate the group which comes closest to the amount of TOTAL family income your parents/guardians make or made in a year.

$10,999 or less
$10,000 - 16,999
$17,000 - 22,999
$23,000 - 29,999
$30,000 - 49,999
$50,000 or more
Don't know

Number of dependents

Institution: Total number of exemptions

Student: How many dependents do you have for whom you provide at least half of their support, excluding yourself?

Savings (net assets)

Institution: Student's (and spouse's) cash, savings, checking account. Student's (and spouses's) assets (current worth less amount owed)--Home equity, other real estate and investments, and business/farm.

Student: At the end of 1986, what were your and your spouse's total assets (fair market value) including savings, checking accounts, cash, stocks, home, business, farm, etc.? What was your and your spouse's total debt, excluding educational loans (including debts on house, other real estate, farm, or business)?

Parents-Institution

Number of dependents

Institution: Total number in household in 1986-87?

Parents: How many people will you and your spouse support between September 1987 and May 1987? Include yourself, your spouse, other children, and any others receiving more than half their support during that period from you and your spouse.

Number in colleges enrolled half-time

Institution: Total number in household in college at least half-time in 1986-87?

Parents: Of these, how many have been or will be enrolled in postsecondary school (in college, university, trade or business school) at any time during September 1986 through May 1987? Please include your spouse, if applicable, but do not include yourself. Will you be in postsecondary school at any point during the period? Of the total number of persons in your family who were attending a postsecondary school during this period (including yourself, but not your child in this survey), how many took more than one course a term or attended for more than 20 hours per week?

Tuition and fees

Institution: What were the total tuition and fees charged prior to any discounts or allowances (for the fall term or program-specific charges, whichever is appropriate)?

Parents: How much was paid to the school for tuition and fees from September 1986 through May 1987?

Parents' taxable income

Institution: Income earned from work--father, mother.

Parents: What was you and your spouse's 1985 taxable federal income?

Parents-Students

Parents' income

Parents: In calendar year 1986, what was you and your spouse's total income (before withholding) from all jobs?

Student: In studies such as this, families sometimes are divided into groups according to how much money they make in a year. Please indicate the group which comes closest to the amount of TOTAL family income your parents/guardians make or made in a year.

\$10,999 or less
\$10,000 - 16,999
\$17,000 - 22,999
\$23,000 - 29,999
\$30,000 - 49,999
\$50,000 or more
Don't know

BEST COPY AVAILABLE